Becoming lost within relational, democratic geographical fieldwork spaces

Submitted by Sharon Witt to the University of Exeter

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I certify that all material in this thesis which is not my own work has been identified and that any material that has previously been submitted and approved for the award of a degree by this or any other University has been acknowledged.

Appreciation Notes

This thesis is deeply personal as well as professional and I hope it shares my enthusiasms and interests for teaching and learning geography, particularly geographical fieldwork. This thesis is not only about geographical fieldwork, but also about my life as a learner, reader, writer, geographer, historian, student, teacher, teacher educator, collaborator, daughter, sister and friend. As Doreen Massey (2005) acknowledges nothing ever happens in isolation. Our work always involves connections with others. This thesis has emerged from relationships with animals, people, experiences, theories, books, ideas, things and places. It would be impossible to thank everyone and all the places that have influenced my thinking and my ideas in meandering conversations and wanderings over the years. I would like to share my appreciation of a few below.

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I have always been enchanted by the stories of Anne of Green Gables by L.M. Montgomery (2013a, [kindle]). These stories tell of a girl looking to belong within the world, set on Prince Edward Island, in the Eastern Canadian Maritimes, which I have been lucky to visit. One of my favourite quotes is:

'Kindred spirits are not so scarce as I used to think.
Its splendid to find out there are so many of them in the world'

Within life I am fortunate to have found people with whom I have shared a natural synergy and wit; they have been formative to my study. My travelling buddy – Hazel – I am hoping there are more holidays to come; we may even get to Tintagel! Also, my dear friend Claire in Edinburgh, who is one of the most inspirational teachers I have had the pleasure to work alongside and who encouraged and nurtured creative approaches to the curriculum.

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I dedicate this thesis to my dear dad – Alan Peter Witt - always loved and remembered. Thank you to both my parents and sister for happy childhood memories of natural places.

Abstract

Becoming lost within relational, democratic geographical fieldwork spaces

In the spirit of exploration and enquiry that is embodied within the discipline of geography, this thesis sets out on an adventure into ‘terra incognita’ to experiment with coming to know geographical fieldwork practices within a primary education context. This is a thesis about how children could be brought into relation with the world through a different kind of geography fieldwork .The current National Curriculum for geography in England (Department for Education (DfE), 2013) foregrounds a knowledge-rich curriculum that makes distinctions between the physical and human, seeking to introduce children and young people to the world as an 'object of thought' rather than as a 'place of experience' (Lambert, Rawling, Hopkin and Kinder, 2012:7). This thesis seeks to unsettle dominant discourses and works with the tensions and discomfort this causes to propose an expanded notion of geographical fieldwork that places relational thinking and understanding at the heart of the subject.

Experimenting with posthumanist/new materialist possibilities for relational, democratic fieldwork I embrace an ethico-onto-epistemological stance that seeks to position geographers as ‘becoming’ within more-than-human assemblages. The thesis shares my commitment to thinking and doing geographical education research differently in these times of environmental crisis. It partially reveals the complexities and intricacies of encounters during a weekend residential geographical fieldwork event within the New Forest National Park around Minstead in Hampshire, United Kingdom in July 2017. It shares the happenings, beings and doings of 12 geography educators as they travel with ideas of place invitations. It follows the geographers’ journeys as they attune and attend to more-than-human/human encounters experimenting with emergent pedagogies that foster surprise and uncertainty. Recent developments in post-qualitative research inspires messy methodologies that seek to disrupt ‘research-as-usual’ (Gannon, 2016:129). I work with ‘getting lost’ as a way of knowing (Lather, 2007) and the notion of ‘productively failing’ (Koro-Ljungberg, 2016a) to invite critical and creative practices to emerge as I ‘befriend my data as an ontologically significant non-human’ (Rautio, 2017:23). Inspired by Bennett’s (2010) radical conception of materialism and matter and Barad’s (2007) ideas of intra-action, I conceptualise fieldwork spaces as alive, inter-connected and in the process of formation. This is a collaborative, hopeful project of attunement, openness, attention

and entanglement. A diffractive analysis (Mazzei, 2014:743) is employed to purposefully ‘plug in’ data/theory/practice from a wide range of fields to honour ‘multiplicity, ambiguity’ and seek new connections. Through relational stories, experimental writing/poetry and collage some of the geographers’ sensory, embodied and affective encounters with stream, trees, bog, heath, ponies, fire, sticks, leaves, flowers and bracken are shared.

Emerging from the thesis is the notion of fieldwork sites as lively and generative; meeting places for difference. Relational fieldwork is contingent, fluid and improvised in the moment. It fosters a pedagogical approach to geographical fieldwork through enchanting encounters with more-than-human elements that engages with ideas of equality, agency and democracy. A relational, enchanted geography entangles learners within a more-than-human community and offers possibilities to ‘turn up the colour and tune in to the world’ (Geoghegan and Woodyer 2014: 219) in order to rethink geographical fieldwork pedagogies.

Key Words: Geography education, fieldwork, intra-action; posthumanism; new materialism, assemblages, enchantment.

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Chapter 1 ~~Introduction~~ (In)Beginning

'We are all explorers. Even as tiny children we search out the limits of our world with our eyes and ears. A few years on, our imagination stretches further: fingers batting at a giddy plastic globe… a spinning top, gaudy with colour, representing perhaps the most ambitious idea possible: the world.'

(Bonnett,2008:83)

1.1. There was no map

My 21-year-old self would not have believed that I would be exploring relational geographies within a doctoral thesis. To be honest my 21-year-old self would never have thought I would be studying for a doctorate. In 1984 I had just completed a history degree and was embarking on the primary school teaching career I had always dreamed of. I was educated in the liberal tradition and was firmly rooted in child centred learning, believing in broad, balanced cross curricular provision. The geography I taught was embedded within topics. Geography found me late – the formal subject discipline of geography that is. I believe that I have always unconsciously inherently been a geographer. In the past I have wandered in and out of my relationship with geography. It is a relationship I have cherished, but rarely had the opportunity to develop fully amongst school leadership responsibilities. The turning point came in 1999 when I completed my full time Masters in Geographical and Environmental Education. The course gave me space to read, to think, to re-engage with theory, to grapple with contemporary educational issues at a time when the literacy and numeracy hours were being introduced into school. I took the opportunity to travel around Australia and further developed my interest in Australian indigenous cultures initiated by Bruce Chatwin's (1988) book 'The Songlines'. 1999 was an eventful year in which I also had the strange, weird and moving experience of watching the total

solar eclipse from a beach in Marazion, Cornwall and was struck by the awesome wonder of nature. I have been smitten with geography ever since – it has been one of my great passions.

Wooldridge & East (1951:161) wrote that 'geography begins only when geographers begin writing it'. I embarked on this doctoral journey because I wanted to practically engage with writing a different school geography. A less certain geography than the one prescribed within the DfE (2013) National Curriculum for England which is the focus of this study. A geography which tried to explore possibilities for more relational fieldwork practices. I have become increasingly disenchanted by the teleological nature of contemporary school geography within the National Curriculum (DfE,2013) which 'guides us to see geography as merely the study of consumption and spectacle' (Puttick, Paramore & Gee, 2018:176).

Inspired by the dynamic, hopeful and joyful geographies of academic scholars, such as Woodyer (2012) on ludic geographies, Pyyry (2016) on photo-walks and Geoghegan (2012) on geographies of enthusiasm, within a primary geography education context I call on educators to 'enchant [their] geographical endeavours' (Woodyer and Geoghegan, 2012:196). Enchantment here is conceived as 'a sensory experience of unintelligibility and a mood of fullness or plenitude' (Ibid). Bennett (2010: online) refers to this mood or affect as 'circulating between human bodies and the animal, vegetable, and mineral forces they encounter'. This thesis explores the possibilities for a geographical fieldwork pedagogy that embraces openness, surprise, uncertainty and being present in the world. It recognises that enchantment is 'associated with the feeling of being simultaneously fascinated and unnerved in the presence of something truly wild or Other' (Ibid). Nurturing enchanting moments is not about grounding geographical fieldwork in an idealised, western and sentimentalised

notion of children's relationships with nature in which young children are believed to have a 'special and close affinity with the natural world' (Taylor, 2017a:1452). This romantic view seeks to emphasise the binary between humans and the more-than-human world positing 'nature as existing out there in a pure space that is somehow separate to the corrupting cultural/technological/urban domain' (Ibid). My posthumanist enchanted stance seeks to resist notions of separation in learner-fieldwork spaces. Rather I seek a more holistic perspective to overcome the nature-culture divide. I explore pedagogical possibilities that create relational spaces to foster enchanting moments through multi-sensory and embodied encounters between a more-than-human world and learners of geography. In this way enchantment is a pedagogical tool as I feel it is a responsibility of geography educators to help children engage with the joys, delights and mysteries of the world we live in. This is a map of my personal and professional journey to create an ecological and ethical space for a more joyful and committed geographical fieldwork.

A journey is 'perhaps the most characteristic geographical practice' (Bonnett, 2008:83). My doctoral journey began from a certain and secure place. I knew my main interest within geography was fieldwork, and I was on a mission to address some of the gaps in research in this area within geographical education (Catling,2013a). I was certain of the direction I wanted to take – I wanted to explore primary aged children's experiences of fieldwork. I was interested in experiences of place and how children's environmental experiences and perceptions could be developed and enhanced within their geographical learning.

Fieldwork is 'an essential component 'within the discipline of geography (Geographical Association (GA) (2009:23), yet it is an aspect of practice that is under-theorised and under-researched. Within primary schools fieldwork is supported

through teacher enthusiasm rather than empirical evidence. In fact, geographical education research is in a fragile state (Lambert,2010) and dominated by positivist, scientific investigations (Morgan & Firth, 2010b). I was excited to embark on this area of research as fieldwork 'takes us beyond current frontiers of knowledge and preconception, enabling first hand discoveries that no amount of theorising or study of pre-existing accounts or maps could ever reveal' (Stevens, 2001:66). As a primary school teacher with 22 years' experience I had witnessed first-hand the impact residential and day fieldwork can have. Now as a Lecturer in Primary Initial Teacher Education (ITE) I was keen to research and listen to children's voices about their experiences. I felt I had a clear sense of direction. But my certainty disappeared in an instant as I encountered post-structural reading for the first time. I read Marcus Doel's (2000) chapter 'Unglunking geography – Spatial science after Dr Seuss and Gilles Deleuze'. It shook my world - it was obscure, at times impenetrable, packed full of disturbing, disrupting and different ideas.

What follows within this thesis are my best efforts to explore how philosophical concepts may be put to work within geographical education. In doing so, I realised that 'everything that once appeared settled and fixed into places become once again mobile elements in a delirious movement of immanent and expressionistic creation' (Doel: 2000:117). Meeting the writing of Deleuze & Guattari ([1988]/2013) for the first time unsettled my current way of viewing geography education and sent my thinking off on a tangent across hundreds of lines of flight. I hope in my efforts to access their writings I have done justice to their thinking. I take comfort from Doel (2000:123) who suggested 'its ceaseless-becoming-other-than what it will have been. Deleuze's philosophy gives rise to events for everyone'. I was unsure where these rhizomatic paths would take me. There was no map to show the way - the route was not-yet

known. Nothing was certain anymore; there were ‘no beings (iss), just becomings (ands)’ (Doel: 2000: 132).

I had expected to find myself reading within the fields of geography and geography education. As I began I found myself getting lost in new worlds of literature: in the philosophy of Gilles Deleuze & Felix Guattari; with ideas of agential realism from Karen Barad (2007); with notions of vital materialism from political theorist, Jane Bennett and with the post-humanist texts of Carol Taylor & Christina Hughes (2016), Rosi Braidotti (2013) and the prolific authors of the Common Worlds Research collective (Pacini-Ketchabaw et al. 2017; Rautio,2013a and Taylor, 2017a). My mind began to make connections with thinking in geographical education and past fieldwork experiences. I was enthralled by indigenous readings which took me to distant lands and recalled dramatic researcher encounters with crocodiles and grizzly bears. I have also fallen under the spell of the prosaic nature writings of Robert Macfarlane (2015), Nan Shepherd (2011), Richard Mabey (2006) and David Henry Thoreau (1972, 1994), who seemed to speak to my soul and to my relationships with a sentient earth. All these new worlds introduced novel theories, fresh language, innovative ways of engaging with geographical notions of place and space. At times they have left me feeling dazed, surprised and disoriented, but also inspired. They have helped shift my thinking to offer a reconceptualisation of geographical fieldwork.

This thesis seeks to unsettle dominant discourses by exploring, developing and articulating alternative approaches that decentre the human and focus attention on the more-than-human elements within fieldwork spaces. This requires an expanded notion of geographical fieldwork that places relational thinking and understanding at the heart of the subject. It shares fieldwork stories of geography educators as they travel across New Forest landscapes exploring ideas of relational practices. These journeys have

made me begin to ponder the complex relationship between the more-than-human/human, increasing my awareness of the complexity and interconnectivity of life. In exploring educators' place experiences, I am reminded of a children's book I frequently read aloud to my classes as a teacher:

1.2 If you want to see a whale…

'If you want to see a whale

You will need … an ocean

And time for waiting…

And time for looking

And time for wondering – "is that a whale?"

Keep both eyes on the sea

And wait

And wait

And wait …'

(Fogliano, 2013)

In the middle of my doctoral thinking about place/space engagements, I had a close encounter with whales in Trinity Bay, whilst on holiday in Newfoundland and Labrador, Canada in August 2015. It set me on course for posthumanist perspectives.

> *A group of travellers embarked on an adventure in a zodiac boat in cloudy weather. As we ventured further into the bay the mist closed in whilst we searched for whales. This was a tourist trip with a difference. I hoped to be with the whales to have a close, intimate encounter at ocean level. The blurb on the Trinity Ecotour website [undated: online] promised 'a greater sense of awe and personal satisfaction … because you are in the thick of it!' … And we let the whales 'be socially interactive if* ***they*** *choose'. It was eerie*

out on the boat as a blanket of fog clung to the ocean. The mournful droning of the foghorn pierced the air. No whales appeared and so we waited, and we waited… It was a real sensory and embodied experience as we were all tasked by the boat's skipper to look out into the fog for signs of the whales' spouts as they exhaled. No whales appeared and so we waited and waited… The air was damp, and time was passing – the fog drew closer. Visibility reduced, and we were told to listen out for the whales' breathing. No whales appeared and so we waited, and we waited… A fish finder was deployed to locate the shoals of capelin that the whales liked to feed on. We found the fish, but no whales. We listened to a hydrophone, an underwater microphone, in the hope of hearing the whales sing. But no whales chose to reveal themselves. The skipper was close to admitting defeat and with the fog closing in was just about to give up when a pod of dolphins appeared (digital file 1). They swam around the boat and then headed off. The boat followed – several humpback whales came into sight… What an awesome moment. We spent twenty minutes watching these magnificent creatures feeding. They were so close to the boat we could almost touch them and could smell the scent of the whales' breath.

This whale encounter was up close, personal and sensory. It felt risky becoming lost in the fog of Trinity Bay. Assembled within this place were cliffs and capelin, gannets, puffins, sea, dolphins, humpback whales, hydrophone, cameras, fish finder, lighthouse, fog, foghorn, boat, skipper and fellow passengers. The humans were decentred with the more-than-human elements within the scene determining the action. The dolphins leading the skipper to the whales seemed unbelievable… It made me think about how I have underestimated the role of the more-than-human within

fieldwork sites and how complicated place encounters are when you consider that humans may not be the only actors; whose stories are told within geographical fieldwork matters. It is important to consider 'the extent to which human being and thing-hood overlap, the extent to which the us and the it slip-slide into each other' (Bennett, 2010:4). I have come to realise that we need to pay more attention to the material and more-than-human elements within an encounter in fieldwork spaces.

1.3 Don't follow me …I'm lost too

As I begin to write this thesis, I was reminded of a patch on my campfire blanket shared in figure 2.

Figure 2: Don't follow me I'm lost too patch

My thesis is an experimental narrative of loss – a loss of certainty, a loss of purpose, a loss of sense of direction and a resistance to the status quo. I set off through this thesis on an adventure. This is a story of adventurous becomings – adventurous geographical becomings. It is undertaken in the spirit of exploration and enquiry that is

embodied within the discipline of geography to try something new, try something challenging. This is about venturing out into 'terra incognita' to experiment with geographical fieldwork practices. A tale of becoming-lost - immersed physically, traversing landscapes, theoretically in readings and attuning and attending to places through the senses.

This is an unconventional thesis, but it also sits within a growing body of work in posthumanist research practices in education (Taylor & Hughes, 2016; Kuby, Spector & Thiel, 2019) and post-qualitative inquiry (Koro-Ljungberg,2016a). It began as a theoretical and philosophical proposal for a reconceptualisation of geographical fieldwork. Halfway through the project it became an empirical study. As a practitioner I felt strongly it was important that the theory was not isolated from the educational contexts it sought to influence. It was a response to Deleuze & Guattari's ([1988]/2013) challenge in 'A Thousand Plateaus' to incorporate philosophy into our lives. As a geographer I felt it was important to be participating within the world. After all, there seemed to have been 'insufficient attention' paid to the 'empirically grounded explorations of posthumanist practices' (Taylor & Hughes, 2016:1). This raised all sorts of questions regarding research design, the 'data' collection and analysis and the ethical situation. I became lost in the messiness of emergent posthumanist methodologies considering 'all experience matters, all experience became matter' (Kidd, 2015:8). I wanted to experience how geographers come to know, feel and act within fieldwork spaces. I explore how fieldwork spaces provide an opening – 'a pause - a space for something else to become' (Wapenaar & De Schutter, 2018:82).

This work shares my efforts to incorporate philosophy into geographical fieldwork and in doing so think, experience and be in the world differently living in, with and through complexity and multiplicity. This makes me consider the liveliness of place and

what changes if we see things from a different view. I look to thinking originally, more organically, with Deleuze & Guattari's ([1988]/2013) concept of the rhizome. In botany a rhizome is a modified subterranean stem of a plant that sends out roots and shoots from its nodes. The rhizome can be an elusive concept as it 'is not an object to be known or a metaphoric representation of something else. It is a practical matter of creation' (Wallin, 2010: 6). Through enacting rhizomatic thinking within this thesis I seek creative experimentation to shift from fieldwork-as-usual to fieldwork-with-difference making connections with more-than-human elements. This is not simply for experimentation's sake, but in the hope of bringing geographers into relationships with their fieldwork space and for more-than-human/human flourishing.

The thesis does not set out to create a definitive 'how to' guide, provide any answers to definite questions or come to any firm conclusions. In fact, I have tried to actively resist presenting models for rhizomatic practice. It is important to acknowledge that 'to speak in terms of a rhizomatic model is to no longer understand the connective potential of the rhizome, but rather to already presume what rhizomatic connections are possible within a particular milieu' (Wallin, 2010:85). Models tie you to 'what is already made, what is already the case, to what is merely possible'; whereas the rhizome opens up 'access to the impossible, the production of the new' (Coley, Lockwood & O'Meara, 2010: [online]). This geographical fieldwork experiment was not guided by a priori assumptions, but rather left open in the hope of creating a plurality of possibilities. I hope that elements of my thesis will resonate and provoke readers thinking to 'weave into the melody of their everyday lives' (Deleuze & Guattari, [1988]/ 2013: xii).

1.4 Rhizomatic meanderings

'Make rhizomes, not roots, never plant! Don't sow, grow offshoots! Don't be one or multiple, be multiplicities! Run lines, never plot a point!'

(Deleuze & Guattari, [1988]/2013:26)

Drawing inspiration from Deleuze & Guattari, I hope the reader will approach this thesis 'as if it were a map: there are entrances and exits everywhere; fold it however you want; follow whatever trajectory takes your fancy, etcetera…Treat it every which way you can' (Doel, 2000:122). This thesis embraces rhizomatic thinking to create spaces for experimentation, discovery and playing with potentialities. My thinking and writing are spontaneously shaped, constructed and reconstructed by experiences through 'multiple entryways and exits' developing their own 'lines of flight' (Deleuze & Guattari, [1988]/2013):22). I am drawn to Deleuze & Guattari's rhizomatic principle of cartography through this work, for mapping is generative, providing me with flexibility to create multiple paths to explore relational fieldwork spaces. Like a rhizome, my study does not stick rigidly to fixed geographical disciplinary boundaries. It sets out on journeys to deterritorialise existing thinking and break down traditional binaries. This allows me to make connections between different events, things, people and places together in non-linear, rhizomatic ways. Within this context the geographer is in constant negotiation with the environments in which they are working.

Rhizomatic thinking embraces non-hierarchical principles as it encounters the world; 'it is transformed by the world and transforms the world in ways which rule out reproduction' (Coley et al. 2010: [online]). This is not an orderly or fixed process, but is a messy, chaotic, dynamic and fluid performance. In fact, fieldwork spaces are positioned as 'untidy, rumpled, never fully cohering, or capturing everything… always provisional never certain' (Barnes, 2007: 1551). This means that the research is always in-between points, never arriving. This thesis as map provides no answers; it only

suggests where to look (Harvey,2000). My thesis is emergent, and I intend to go with the flow to allow my writing and practices to take me in unexpected directions. I embark on this study unsure what is going to happen.

There are concerns that 'a rhizome can be a dangerous thing' (Wallin, 2010: 86). Within this thesis I have tried to heed Deleuze & Guattari's ([1988]/2013:185) warning that 'y*ou don't do it with a sledgehammer, you use a very fine file'. W*hen one nurtures connections or creates a becoming it must be composed carefully (Coley, et al. 2010: [online]). Yet I believe the potential that rhizomatic thinking offers to explore and experiment with relational geographies is worth the risk. Rhizomatic thinking helps me to foreground connectedness between more-than-human and human elements within fieldwork spaces. This thesis has attempted to recognise 'the radical potential of rhizomatics' for thinking with 'a relational ontology of difference' (Wallin, 2010: 84) within geographical fieldwork. Although at times the rambling, meandering nature of the study has made the project seem immense, I have tried hard not to tame the rhizomatic nature of my study. As Deleuze & Guattari ([1988]/2013: 26) reminds us 'rhizomatic thinking cannot be pinned down; instead it works with the conjunction 'and... and... and...'

Although I have tried to enact the spirit of rhizomatic thinking throughout this thesis, there may be times when a rhizome is broken or slows down and becomes static, solidifies and becomes fixed, that is, made predictable. Deleuze & Guattari ([1988]/2013) refer to this as an arborescent understanding of knowledge. As I proceed it is important to see that the rhizome and the tree are not mutually exclusive ways of thinking and their relationship should not be placed in a binary - 'rather, they coexist, are within each other' and may 'comprise two different strategies' (Coley et al. 2010: [online]).

This thesis is a rhizome of posthumanist/new materialist/geographical fieldwork emergence. As Reinertsen (2016:2) writes ‘discourses and matter are mutually constituted/ing in the production of beingknowing’. More-than-human, geographers, theory, practice, experience, reading and the imaginary are all engaged within this project. This thesis is written in different ways to experiment taking ideas along new lines of flight. At times the writing is formalised, organised and developed in consideration of academic conventions. In other places, I write with poems and poetic thinking to invite the reader to participate and engage with the ideas, feelings and realities shared (Janesick: 2016). It is an attempt to become more playfully rhizomatic in the ways I approach methodology, theory and sharing knowledge-in-formation.

To some my thesis may seem to have a somewhat conventional humanist qualitative structure. It mostly follows established, institutionally approved ways of organising a doctoral thesis – introduction, rationale, theoretical framework, methodology, findings and conclusion. This initially reflected my naivety as I set out on my posthumanist experiment. As I wrote, like Thiel (2014:5) I often felt ‘as though I was trying to put a square peg in a round hole’. At times the traditional headings felt as if they were forcing my study into pre-given categories and offered a simplistic, technical organisation. Yet I wanted my thesis ‘to do justice to the complexity of the world’ in the spirit of recent ontological, posthuman, affective, new material, and new empirical turns (St Pierre, 2019:3). Inspired by the work of Koro Ljungberg (2016:3), the strikethroughs of my chapter headings mark a turn away from conventional humanist qualitative thesis structures and mark my attempt to embrace epistemological diversity and methodological flexibility. Spivak (1997: xiv), drawing on Derrida, refers to this as putting language ‘under erasure’ indicating a departure. My headings therefore mark the beginnings of a move from more traditional thesis organisation to offer new

headings: (In)beginning, lost within the curriculum…, opening the crack in the here and now, taking the plunge and getting lost, terra incognita, New Forest fieldwork assemblages and opening up many little futures. These new chapter titles represent 'an opening, the possibility of something different' (St Pierre,2019:4). Both titles sit side by side on the page to allow each reader to think and determine whether they find them useful. This thesis has 'a structure in its unstructuredness – (note: I do not refer to randomness, but to a structure that works against structure)' (Koro-Ljungberg, 2016a: xvii). My study represents a commitment to thinking and writing about geographical fieldwork research differently continually questioning existing grand narratives and dogmas.

(In)beginning my thesis necessarily starts in the middle – it begins by highlighting and connecting different events, ideas, experiences, people and places together that have already happened to explore ways in which the researcher has already engaged in entangled worldly relations. 'The middle is by no means average: on the contrary, it is where things pick up speed…a stream without beginning or end that undermines its banks and picks up speed in the middle' (Deleuze & Guattari, [1988]/2013:27). My thoughts are not 'a consecutive temporal chain'; rather they are 'a set of discontinuous moments lifted out of the stream of time' (Sinclair, 2001: 137-138). Within my career there has been no grand master plan, no clear traceable path on my route to a Senior Lecturer post within Higher Education. It has been a story of lived experience and emerging praxis influenced by a complex range of intertwining historical, cultural and political influences that has brought me to my doctoral thesis now. The poems below emerged from an autobiographical piece of writing. I use the poem as a way that 'cuts things together apart' to produce a diffractive pattern (Barad, 2007). Haraway (2004:70) suggests that diffraction is a 'mapping of interference.' My poem seeks 'to

map a myriad of interferences, of human and nonhuman encounters and nonlinear figurations of time and space' (Barraclough,2017:163). A poem can produce an affective force with the reader. Poet David Whyte (2010: [online]) suggests that 'poetry…is not about a subject, not about a quality, or an experience, it is the experience itself'.

1.5 A place in my heart

To know who you are, you have to have a place to come from (McCullers, 1981)

My journey begins with the Weald of Kent

Nestled between chalk escarpments of the Downs

Happy childhood days

amongst woodlands, clay vales and sandstone outcrops

'There was an Old Toad' in my village (figure 3)

A geological wonder

Past shapes our present

The landscape seemed to be alive

It spoke to me

Full of characters and forms

Extending self into the environment

'It is animate because we are part of it' (Dillard, 1987:101)

Walking, climbing, playing, naming and weaving stories.

I could always hear the language of landscape

'loud with dialogues' (Spirn, 1998: 17)

Storylines that deeply connected

to the 'largeness of life' (Palmer, 1998:1).

Figure 3: Toad Rock

Rooted in the senses, feelings and images of these childhood landscapes

Entangled with the ecology of

'a beckoning world' (Hoffman, 2013).

1.6. A place of imagination

Alternative worlds

Distant lands – the wild west, Waratah National Park in Sydney Australia, Oahu, Hawaii.

Hours spent in the garden and school playground

Riding horses, superhero adventures and playing schools

On board with the 'Double Deckers'

Homework for teddy bears

An inseparable imaginary friend

I easily slipped between dual worlds – real and imagined

Opening novel ways of the world

'Ventures for future thought and action' (Golomb,2011:173)

What's in the loft at Nursery School?

Climb the ladder to view the unknown attic world

A world of giants, dragons and elf-like characters.

When I return, I still seek the secret path

To where the fairies play

Others did not see

'People go about with their eyes shut…

…no one has taught them how to see' (Buckley, 2006:9)

Learning adventures in local woodlands and further afield

Opening worlds of wonder

Waiting to be discovered by children in my classes (figure 4)

Taking mystical journeys into the unknown

Searching for boggarts

Place making for elves

Troll tracking

Arthurian myths of dragons and castles

An eco-pedagogical approach (Payne,2010)

Weaving stories with real world encounters

Imagining the elves let our minds go free

we didn't have to worry about anything…

Opening children's imaginations to unforeseen forces

Leads to a deep relationship with place

Figure 4: Waiting in woodland

Local woodlands become sites of knowing and inspiration

Working with beginning teachers

'to see (and hear, and feel) beyond the visible world' (Fettes, 2005:3)

To uncover a sense of wonder and awe

1.7 Shadwell woods: a special place

Woodlands are places of mystery, myth and magic

Personal stories and professional transformation

'We are forest people' (Maitland, 2012:9)

Shadwell Woods (figure 5)

A place of memories

A place for all seasons and in all weathers

Being 'in the midst rather than on top of things' (Abram, 1997: 49)

Figure 5: Shadwell Woods

Family, dogs, friends

Paddling in streams, tree climbing

Broken arms, puddle jumping, mud monsters

mysterious bogs where people disappeared

Afternoon shady picnics, throwing leaves and snowball fights

carpets of bluebells in springtime

sunlight filtering through the new leaves

Fascination with the rusty colour of the ferruginous water

Shadwell Woods – a relationship built over time

An unhurried, felt experience - up close and personal

'To see, smell, taste, hear and feel' this landscape

as 'a symphony of complex harmonies' (Spirn,1998: 22).

It is a different kind of learning and knowing

'an imaginative and creative engagement rather than a logical connection' (Maitland, 2012:320)

1.8 And …places of disconnection

A childhood full of geographical enchantment

The world felt personal… loved

Then a BREAK *in rhizomatic lines of flight*

'freedom is easily lost' (Bonnett,2008: 82)

A demanding teacher

Weekends filled with homework

A diligent student powerless to challenge

Rupture in a natural childhood.

A rhizome broken – shattered (Deleuze & Guattari, [1988]/2013)

'the breakage of a rhizome's lines doesn't cripple the whole' (Coley et al. 2010: [online])

Concern for equality and social justice emerged

Championing the unseen, listening to marginalised voices

Making a difference to children's lives

They will never forget how you made them feel' (Buechner, u.d.)

'Geography requires freedom' (Bonnett, 2008:82)

1.9 Opening the door

'Break out and head for the horizon' (Nardi, 2014)

Don't fit in and conform

Refusal to be tied down

Borne from a desire to experiment and explore

'To boldly venture forth on creative lines of flight' (Doel, 2000:22)

In a constant state of flux

ACCOUNTABILITY, CONSISTENCY, MONITORING FOR COMPLIANCE AND UNIFORMITY

With my professional compass (Brooks,2015)

This is not an easy path to navigate…

'nothing simply 'is' as it would appear to 'be'

… they are always already becoming-other,

becoming undecidable

becoming–imperceptible'… (Doel, 2000:22)

1.10 A spirit of moreness

Now in Teacher Education I find the landscape of professionalism is continuing to change at a rapid pace with multiple routes into teaching, knowledge led statutory orders and a narrowing of curriculum which has influenced pedagogy. Where is the space for interrogating the mind (Brooks, 2015) or for notions of educating the person rather than training them for the profession? In my work within a Teacher Development department I seek to resist some of the habitual practices within the contemporary educational landscape. I embrace and nurture a notion of moreness:

> 'Moreness has a spirit to it, a spirit which asks us to realise our own finitude, our own ignorance, and calls us to transcend the known, the expected, even the ego and the self. In such uncertain trajectories, serendipity is welcomed, and learning is a journey into the land of the unknown, taken by ourselves, but with others' (Huebner,1999:405).

This spirit foregrounds relationships and interactions and encourages us to play with, and explore, uncertainty and difference within our research. It is about 'cultivating dispositions to life-sustaining entanglements so we might interdependently dwell in spaces shaped by care and concern for our shared lives on/with this planet' (Reinertsen, 2016:2). The underpinning vision of Rights Respecting Education (RRE) allows our Department to take a courageous view of Teacher Education that is 'more than' the Teaching Standards. As my teaching identity has emerged, I have come to see the role as more than a technician and value the artistry of the primary teacher (Eisner, 2003). This provides an alternative to the 'take away pedagogies profligate in education' (Payne & Wattchow, 2009:15) and acts as a response to the 'gloom and doom' approach to environmental education (Gruenewald, 2003:7). Henri (1960:33) in his book 'the art spirit' explains that being artistic:

> '…is simply a question of doing things, anything well. It is not an outside, extra thing. When the artist is alive in any person, whatever his (sic) kind of work may be, he becomes an inventive, searching, daring, self-expressing creature. He becomes interesting to other people. He disturbs, upsets, enlightens and he opens ways for a better understanding. Where those who are not artists are trying to close the book, he opens it, shows there are still more pages possible…'

I seek an artistic response to geographical fieldwork to consider more-than technical, multiplicitous ways to nurture relationships with the natural world through education.

1.11 Geography: coming into relation with the world

With the notion of moreness in mind, I seek to take a fresh look at how approaches to geography education can be broadened and deepened through taking a hopeful, radical, critical stance. During the writing of this thesis at the International

Geological Congress on 29 August 2016 scientists declared that humanity's impact on the Earth is now so profound that a new geological epoch - the Anthropocene - needed to be declared. This is 'the first geological epoch where a step-change in Earth surface conditions has been caused, albeit unintentionally, by people's combined activities' (Castree, 2015: 66). Although this declaration remains unratified, it is no longer possible to deny 'the inextricable enmeshment of human and natural histories, fates and futures' (Taylor, 2017a:1449). Payne (2016:169) suggests that 'the advent of Anthropocene acts like a storm on thought; it changes what really matters.'

As the 'world discipline', (Bonnett, 2008:9) geography is often heralded as able to address and have a lasting impact upon the pressing economic, environmental and social crises of our time (Woodyer & Geoghegan, 2013). This is a result of geography's unique position as a subject discipline that bridges the social sciences (human geography) and the natural sciences (physical geography) (Royal Geographical Society, 2014). The interconnectedness of people-place relationships lies at the heart of geography. But as Woodyer & Geoghegan (2013: 1) point out, the scale and scope of global challenges can leave geographers feeling 'disenchanted'.

As a primary geography educator working with non-specialist beginner teachers in Higher Education, I see it as my professional responsibility to reflect carefully upon an educational response to these times of supercomplexity (Barnett, 2008). I find it concerning that within the National Curriculum for schools in England (DfE,2013) environmental issues and sustainability have been marginalised. This seems remarkable when 'climate change, species loss, population growth and the depletion of natural resources have become one of the meta-narratives of our time' (Scoffham, 2013: [online]). It has left many within geography 'feeling helpless, depressed and defeated in the presence of such unrelenting forces' (Woodyer & Geoghegan,

2013:195). It seems to be time for interrupting geography education as usual in order to disrupt dominant discourses and practices that position humans as 'sleepwalking into the future' (Scoffham, 2013: [online]).

Lack of environmental issues is just one element of the contemporary disenchantment discourses surrounding primary geography as a marginalised discipline both within schools, University education departments and in terms of research (Catling, 2015). This disenchanted narrative is expressed in a range of sensibilities around the subject leading to disconnection and growing detachment from real world landscapes. Disenchantment 'enters into the moods, temperaments, habits, perceptual comportments, and somatic predispositions that find expression or resistance in political choices, alliances, and policies' (Bennett, 2001:16).

Geography within the primary curriculum is in the doldrums in many schools. I turn to Hicks (2014: 106) who reminds us that we need to avoid 'unwittingly evoking despair' by tapping into 'deep hope' in 'these troubled times'. This thesis aims to take a hopeful, affirmative stance as my personal response to the uncertainty within current University teacher education contexts and the silence of my subject within the national agenda. I am adamant that dominant discourses will not dampen my enthusiasm and efforts to deepen beginner teachers' acquaintance with the world and develop their confidence deepening their understanding of different fieldwork practices. I seek to work with a hopeful ontology for 'without a minimum hope, we cannot so much as start the struggle' (Freire,2004:2-3). As Moltmann (1975:188-189) writes about the experiment of hope for 'whoever begins with hope is aiming to create new experiences.' Like Moltmann, I recognise that hoping is a risky matter; it can bring disappointment, but also surprise. It is surprise I am interested in for as Pyyry (2016: 110) acknowledges 'enchantment is inspired by surprise'. This thesis is my response

to the ‘wake-up call’ of the Anthropocene ‘naming event’ (Taylor, 2017a:1450). I would like to propose geography as more-than accumulated knowledge; that is geography as a subject of becoming, where in moments of ‘hopeful’ fieldwork encounters geographers come into relation with the world.

I seek to pay attention to how Anthropocene discourses may manifest within geography education and how creative and critical practices may materialise within fieldwork spaces. My thesis does not set out to prepare learners for the global and environmental challenges they may face in the future. Rather it proposes a new kind of scholarship and practice within primary geography education that nurtures an open, attentive, vital attachment to the world and engenders a mood of enchantment. I believe notions of ‘enchanted geography fieldwork’ is valuable within the contemporary contexts of primary geography within the National Curriculum, dominated by narrow, mastery narratives that focus on explicit knowledge. I believe it may offer possibilities for primary children to ‘en-joy the world’ (Nietzsche, 1976 in Bennett, 2001:12) and foster ‘deeper intuitive subject knowledge that is rooted in experience and more-than-human/human relations. To nurture enchanting moments primary geography teachers, need to create time and space for playfulness, surprises, questions and changes of direction. This hopeful approach sets out to inspire learners ‘to look at the world anew’ and to ‘make the familiar unfamiliar’ (Pyyry, 2016:102). It seeks to nurture fieldwork that places children within a collective more-than-human world valuing and trusting ‘the generative and recuperative powers of small and seemingly insignificant worldly relations’ (Taylor, 2017a:1458). This embodied and sensory fieldwork can ‘sometimes open up new pedagogical spaces of enchantment’ through an ongoing engagement with the world, ‘a development of embodied skills of perception and action’ and ‘paying attention to experience as it is experienced’ (Pyyry, 2016:103).

This is a radical, critical approach that recognises geography as inherently moral and political project that is wrapped up in the lived experiences of participants. This experiment seeks to 'radicalise' the potential of fieldwork pedagogy in order to develop pedagogical practices that support a truly emancipatory stance. I acknowledge that social justice is a complex notion (Catling, 2003) and that some geographers would suggest that social justice 'is just about moralising and has no place in a curriculum' (Standish, 2004:89). Yet for many, geography is the subject which gives voice to the marginalised, that seeks to listen to the 'other' and that honours diversity.

A broader, more inclusive view of geography education that seriously considers issues of more-than-human/human participation and democratic engagement within fieldwork spaces lies at the heart of my commitment to explore relational geographies.

So, this thesis is a place of experimental stories…

A multiplicity of stories

Stories of the places of geographical education

Stories of materials, elements, things in those places

Stories of relationships, entanglements and connections

Stories are told in many ways

Through words and writing

Through collage, art and humming

Through sound and texture

Through water and mud

Grappling with ideas

Whist traversing landscapes

This thesis shares lively stories (Van Dooren, 2014) of attentive geography educators who explore relational geographies through ideas of place invitations, whilst

wandering with ‘multiple others’ in New Forest fieldwork spaces. These were undertaken in a spirit of openness, enquiry and geographical curiosity. It is with some trepidation I venture forward to take my first tentative footsteps into uncertainty…

The first steps to getting somewhere is…

to decide that you are not going to stay where you are...

Dear Reader,

This letter is a personal invitation to join me on this thesis journey. We undertake this travel in the company of a multitude of others, both more-than-human and human. As we explore possibilities for relational geographical fieldwork, I hope you are able to make connections to personal, sensory, embodied and affective place encounters you have experienced.

I am fortunate to live near Gilbert White's House in Selborne, North East Hampshire. This 'place of echoes and responses' (Mabey, 2006:15) has regularly inspired my teaching and research work with students. Gilbert White was a parson, naturalist, ornithologist and journal keeper, who lived from 1720 to 1793. His 'Natural History of Selborne', first published in 1789, is currently the fourth most published book in the English language. White 'led a gentle ecological revolution in the way humans see the world' (Wood, 2006 [online]). He was the first field naturalist whose English writings 'conjure an Parish in a mix of science and poetry and his cast was drawn from people and

animals around him - from Timothy the tortoise to the humble garden spider' (Wood, 2006 [online]). He was the pioneer of the modern idea of ecology and wrote about these animals and people as relating to one another. Gilbert White has encouraged generations of people to see the world differently in a deeper, more profound way.

My hope is the ideas within the thesis may help you think differently about the natural world. So, I share Gilbert's aims for this work as we move forward together...

kind regards
Sharon Witt

'If the writer should have induced any of his readers to pay a more ready attention to the wonders of Creation; or if he should through his researches have lent an (sic) helping hand towards the enlargement of the boundaries of knowledge; his purpose will be fully answered.'

The Reverend Gilbert White - 'From the Advertisement to the Original Edition of the Natural History of Selborne - 1st January 1788

Chapter 2 ~~Rationale~~ Lost within the curriculum…

'To lose oneself: a voluptuous surrender, lost in your arms, lost to the world, utterly immersed in what is present so that its surroundings fade away …And one does not get lost but loses oneself with the implication that it is a conscious choice, a chosen surrender, a psychic state achievable through geography'

(Solnit, 2006:6)

2.1. Relational geographies matter

Within this chapter I set out on this experimental journey through current geographical education landscapes seeking to 'get lost' amongst the literature to explore possibilities for reconceptualising geographical fieldwork practices. Immersing myself within geographical, educational and philosophical fields a new path leading to relational geographies has begun to emerge. Curiosity has drawn me into unknown territories as I explore geographical concepts of place, space and interconnectedness in order to connect geographers with physical worlds. I wander with ideas and wonder what is missing from current conceptions of geographical fieldwork within the National Curriculum in England (DfE, 2013). I question their fitness for contemporary purposes. In exploring how dominant discourses within geography education situates learners I suggest a complementary approach that proposes relational thinking and understanding should lie at the heart of the geography curriculum.

In a complex and dynamically changing world I find myself grappling with the idea of how a geography education can best prepare our young children to develop a deep understanding of, and relationship with the contemporary world. This is a world characterised by **'**high mobility and diversity**,** digital technologies and divides**,** blurring boundaries and an increasing awareness of the interdependence of our lives**'** (Taylor,

Blaise & Giugni, 2013: 48-49). I have a particular interest as an educator in fostering children's relationships with natural places. Yet a narrative of loss surrounds the natural world. The 2016 *State of Nature* report from the RSPB shows that Britain is 'among the most nature-depleted countries in the world', with 53% of British species in decline – among them barn owls, newts, hedgehogs, sparrows and starlings. Quite literally, as species disappear young people cannot experience them; this is 'an extinction of experience' (Pyle, 1993: 134). The Connecting with Nature report from the RSPB (2013) found only 21% of 8–12 year olds in the UK to be 'positively connected to nature'. This could be due to 'changing regulation of 'childhood' that has meant previous generations of children had more freedom, more time and therefore more opportunities to connect to nature' (Malone, 2016:391).

Phrases, such as 'nature deficit disorder' (Louv, 2005) and 'nature knowledge deficit' (Cameron,2016) are used to describe the impacts of increasing alienation from natural world. The RSPB (2013) reported that disconnection with the natural world is complex and influenced by socioeconomic and cultural factors. This report identified that 'nature connection' is not only a conservation issue, but also one concerned with education, physical health, emotional wellbeing and future attainment. Yet others comment on the 'impossibility of a 'disconnection' (Clarke & Mcphie,2014:11) for Morton (2010:253) states we cannot mourn for the loss of a connection to nature 'because we are so deeply attached to it – *we are it'.*

I believe an educational response is needed for this perceived disconnection and geography could be uniquely placed to support this. Geography is one of just a few National Curriculum subjects to explicitly mention engaging children directly with the outdoors to undertake fieldwork. My thesis focuses 'not so much on what is lost when nature fades, but on what is gained in the presence of the natural world (Louv, 2005:34-

5). Indeed, this has inspired a new line of geographical thinking 'to seek to learn from what is already going on in these worlds' (Taylor,2017a:1448). I propose a shifting of thinking from nature deficit to 'nature-naiveté' (Witt & Clarke, 2013). Naiveté is conceived as a lack of experience, innocence, or simplicity. A naif, or inexperienced person, is in the process of formation, and responsive to others. I propose that many young people are, as yet, relatively unmarked by experience (Rosaldo, 1993); in this context, they are unmarked by the companionship of nature. Nature-naiveté, however, suggests potentiality (Witt & Clarke, 2013).

As I develop my ideas, I am mindful to avoid a normative romanticised discourse of fieldwork-as-a-good-thing' (Horton & Tucker,2019:85). I recognise that fieldwork may not be a comfortable experience for all children and fieldwork spaces can be sites of distress, anxiety and ordeal (Ibid:83). Birnie and Grant (2001) identified factors that may contribute to discomfort on fieldwork. These included being away from home; being away from supportive friends and family; being in a challenging physical environment; being in a challenging social environment; being asked to divulge personal responses; living communally and a lack of privacy; being on unfamiliar territory and completing tasks in groups. This discourse is missing from geography education literature but can be found within Higher Education research (Nairn, 1994; Hall, Healy and Harrison, 2004) which offers critique of fieldwork as 'masculinist, ableist, exclusionary practice' (Horton & Tucker,2019:83). I wonder what kind of geographical pedagogy may foster inclusive child/place relationships in educational ways. A relational turn would raise issues of engagement, inclusion and participation with the idea that humans 'come into being in and through relationship with the world' (Belenky, Clinchy, Goldberger & Tarule (1986) in Lysaker and Furuness, 2011:187).

2.2 Flirting with fieldwork spaces

It has often been stated that geographers ‘learn through the soles of their feet’ (McEwan, 1996:379) and so my proposal for relational geographies is rooted in the practice of a particular kind of relational geographical fieldwork. This thesis shares my experimentations to (re)imagine geographical fieldwork spaces relationally. Through flirting with notions of space (Crouch,2010a) I propose ‘explorative, uncertain and tentative engagements’ within the natural world that promise new ways of ‘feeling, moving and thinking’ (Crouch, 2010b:5). This would offer opportunities for geographers to become lost within ‘unbidden or unanticipated happenings’ embracing a Deleuzian and Guattarian notion of becoming as possibilities for engagement open up (Crouch,2010a:87). In flirtatious mode fieldwork spaces are contingent, sensual and full of anticipation about what might emerge. Space and place are positioned as inextricably linked and are explored in this context throughout the thesis. Massey (2005) suggests a place is known through the interrelations of animals with the environment. The fieldwork space would be viewed as ‘a meeting place’ (Cresswell, 2008) or ‘a place of negotiation… between different elements’ which might be ‘persons, technologies, discourses, materialities’ (Fors, Bäckström & Pink, 2013:174). This would be fieldwork that nurtures ‘relational knowing’ involving ‘multisensory responses in a particular moment’ produced in collaborations (Somerville, 2008:212). A sensory, affective and embodied fieldwork journey that makes visible, audible and felt the more-than-human aspects of the fieldwork site. This would acknowledge the liveliness of fieldwork spaces and incorporate the ‘in-human (including the agency of animals and objects) and non-human - the pull of the world’ (Lea, 2007:134).

Fieldwork spaces, I believe, are always more-than-human, but this is rarely considered in contemporary fieldwork discourses or educational research. This term,

more-than-human, feels clumsy, but as Head (2011: [online]) suggests, it illustrates the difficulty scholars have 'in shifting … modes of thought, language and practice'. Throughout this thesis the term 'more-than-human' has been used intentionally in order to situate geographers within the fieldwork space and suggest to the reader that 'humans are always in composition with nonhumanity, never outside a sticky web of connections or an *ecology* of matter' (Whatmore, 2006:603). Yet it still acknowledges the 'pervasiveness of human influence' and its interaction with nonhumans which could include: plants, animals, rocks, weather materials, weather, atmospheres, imaginings, memories dreams etc (Head, 2011: [online]). When other terms, such as, non-human, are used within this work I am quoting directly from the text of another author.

Relational fieldwork enables geographers to become immersed, lost… within a crowd of more-than-human others. It positions geographers differently. They are not visitors or strangers, but part of the fieldwork site. They belong with the diverse 'intimate ongoing togetherness of beings and things' (Cloke & Jones, 2001:649) that constitutes fieldwork spaces. This perspective seeks to reduce the human/nature binary. Relational geography practices acknowledge there are ways of knowing, doing and being that are present and emerge in the action of encountering fieldwork spaces.

2.3 The current geography curriculum

The most recent National Curriculum (DfE, 2013) reasserts the importance of geography as a statutory subject within the primary curriculum. The documentation promotes an 'essential knowledge' to support government priorities for education as 'an important mechanism to encourage economic growth' (DfE, 2010:3). This knowledge-rich curriculum seeks to introduce pupils to 'different areas of knowledge, such that they can see beyond their personal experience' (Standish, 2013). It is argued by the government that this knowledge will promote equality and inclusion in education

as knowledge acquisition leads to ‘the accumulation of cultural capital which is the key to social mobility’(Gove in Coughlan, 2013: [online]).This ‘knowledge turn’ (Lambert, 2011a) within the curriculum directs the purposes of education towards what Biesta (2010a) refers to as qualification. This is a linear, deterministic construction of education where children are taught a set of pre-determined outcomes in order that their progression and attainment can be measured. Scoffham (2011:128) suggests such an approach creates a situation where ‘both teachers and students …collude in a self-enclosed cycle of teaching and assessment.’

Within geography the curriculum provides a list of ‘essential knowledge’ under the headings: locational knowledge, place knowledge, human and physical geography and geographical skills and fieldwork to inform school teachers about the content. This is a universal list of generalised content regardless of the school’s environmental context or the needs of individual children. Within this curriculum (DfE, 2013) place is positioned as fixed locations that can be known and described by humans. Scoffham (2011:128) suggests this ‘offers both teachers and students a misleading sense of certainty'. A geography curriculum that solely focuses on knowledge raises questions. Lambert (2010:85) has previously cautioned against ‘invented exclusivities’ suggesting geography educators should be wary of limiting themselves to one approach just because some aspects of the subject ‘lend themselves to empirical evidence gathering’. Something is lost within this approach. A dominant view of a knowledge-led curriculum fails to recognise children’s lived experiences of the world and that children ‘experience space in different ways to adults and with significant consequences’ (Yarlwood & Tyrell, 2012 123). It also neglects to acknowledge recent work completed by geography educators who recognise the value of placing children’s

geographies ‘in dialogue with authoritative (geographical) subject knowledge, not as subservient to it’ (Catling & Martin, 2011:317).

Despite these concerns the ‘essential list’ geography curriculum has been welcomed by some educators for ensuring all children will have basic factual place knowledge, vocabulary and possess certain fieldwork and map skills in order to locate significant places and human and physical features (Catling, 2013b). This curriculum (DfE, 2013) responds to a knowledge gap identified within past Ofsted reports (2005, 2008, 2011). Ofsted reported the difficulties children experienced when trying to place their learning within a spatial context and use appropriate geographical language. Ofsted (2011:4) state that this core knowledge ‘is essential if students are to make sense of the world around them and place their studies in a wider national, international or global context’. There can be no denying that core knowledge is one key feature of rigorous disciplinary knowledge (Lambert, 2011a; Owens,2013). Yet, there is a need to be cautious of a geography that is reduced to purely core knowledge: one that separates body/mind, child/adult, knowledge/enquiry or experience.

There are lessons to be learnt from the past. Ofsted (2011) reported the last time knowledge was emphasised teachers became over reliant on published schemes, such as the Qualifications and Curriculum Agency [QCA] units of work, creating a ‘one size fits all’ culture (Narayanan,2007:7). Dominant practices encouraged by curriculum prescription and accountability reduce the complexity of the pedagogical process. Currently, this is evident within government discourses promoting direct teacher instruction models and the use of text books reducing teaching to transmission, with child-led and enquiry methods being actively discouraged (DfE, 2018). In this instance the purposes of education are directed towards what Biesta (2012: 13) refers to as socialisation ‘i.e. the insertion of newcomers into existing orders’.

There are different ways of knowing the world. As Lambert, Rawling, Hopkin & Kinder (2012:1) suggest 'simply knowing' a set of geographical facts and information 'is not, in itself, geographical thinking'. This approach could lead to an overreliance on the subject content without proper attention to the interests, personal geographical experiences and motivations of young people and may lead to a curriculum with inert content that has no relevance or significance for students (Lambert & Morgan,2010). In prioritising qualification and socialisation purposes of education, the heavy certainties suggested by a knowledge-rich curriculum threaten what Biesta (2010a:85) refers to as subjectification i.e. the process of 'coming into presence'; a process of 'coming into the world' in unique ways that are not predetermined. This may hinder the development of 'a curriculum of engagement' in which 'young people are excited and interested to understand the world around them' (Lambert & Morgan, 2010:49).

2.4 A knowledge by acquaintance

An 'essential knowledge' curriculum will not be sufficient alone to promote a relational geography in the field. In fact, the National Curriculum for geography in England (DfE, 2013), particularly at key stages 1 and 2 makes clear distinctions between the physical and human as the table I created in appendix 1 shows. This essential knowledge approach can hinder and limit young children's relational encounters with the world. In proposing a relational geography, I am trying to shift the focus from 'a study of givens' to consider 'what [geography] might be' (Puttick et al. 2018:173). I seek to invite geographers to engage directly 'bringing the world to life' (Phillips & Jones, 2012:190). This geographical experience would privilege subjective, embodied and personal responses in order to come to know fieldwork spaces. An approach that recognises the individuality and uniqueness of both the place itself, the knowledge that resides within the place and children's responses.

A relational geography promotes place knowledge as a 'knowledge by acquaintance' (Bonnet, 2009:48) nurturing proximity, experience and engagement. It is often curiosity driven and can offer a form of 'enchantment' (Phillips & Jones, 2012:190). Enchantment and curiosity is where children 'notice new colours, discern details previously ignored, hear extraordinary sounds, as familiar landscapes of sense sharpen and intensify' (Bennett, 2001:5). Enchantment offers an alternative dimension of learning and points to other than human, liminal domains as alternative realities which require imaginal (i.e. narrative, poetic, somatic, experiential) methods of cognition and re-cognition (Voss,2013: [online]). It can provide a counter to dominant disconnection discourses by nurturing open, attentive enthusiasm for the world. In addition, engaging affectively and physically with places can foster well-being, sense of belonging and rootedness (Tanner, 2009). Relph (2008:49) suggests that to know a place you need to experience it from the 'inside' where 'you are surrounded by and part of it'. This kind of knowledge is vital for connecting to the natural world, but Relph (2008:48) acknowledges this 'spirit of place knowledge is subtle and nebulous and not easily analysed in formal and conceptual terms.' It tends to be something that is felt, not easily put into words rather than being able to be measured.

2.5 'From the field… not the armchair' (Stoddart,1986: xi)

Fieldwork can be defined simply as any component that involves leaving the classroom and learning through first-hand experience (Boyle et al. 2007). But it is a term that is not straightforward. Within this thesis I will be considering geographical fieldwork but wish to acknowledge that this is related to and informed by fieldwork within other disciplines, such as science, anthropology, archaeology. Fieldwork is part of geography's heritage (Sauer, 1956) and, has always been 'central to the enterprise and imaginary of geography' (Bracken & Mawdsley, 2004: 280). For many, within the

subject discipline the field is ‘depicted as the locus of becoming for the real geographer ‘(Powell,2002:267). Yet fieldwork’s place within the geography curriculum remains ‘contested, unclear and under threat’ (Lambert & Reiss, 2016: 29). There has been a decline in fieldwork (Ofsted, 2011) which has ‘been blamed on logistical challenges and worries about health, safety and litigious parents’ (Phillips, 2012, 79). Time for fieldwork is often limited due to ‘an overcrowded curriculum’ (Alexander, 2010, 213) and the need to achieve good test results in the core subjects. Lambert & Reiss (2016:29) summarise current issues surrounding geographical fieldwork: ‘the fact is that geography can be done without venturing into the field: indeed, it is often simpler, and (organisationally) more straightforward (and cheaper) to avoid the messy and unpredictable real world.’

Yet fieldwork is statutory (DfE, 2013) and geographical fieldwork has been promoted as a fundamental component of effective contemporary learning experiences throughout existing literature (Richardson, 2010; Cook, 2006; Boyle et al. 2007; Hope, 2009; Lambert & Reiss, 2014). The geographical fieldwork experience has been found to be motivational and engaging (Ofsted 2008, 2011), to create memorable episodes (Mackenzie & White 1982) and to lead to cognitive and affective gains in students (Nundy, 1999; Lambert & Reiss, 2014). Fieldwork embodies geographical notions of exploration and place enquiries and the relationship between them (Lambert,2011b). Lambert & Reiss (2014: 9) made a compelling case for fieldwork (see table in appendix 2).

Whilst fieldwork cannot guarantee the gains cited, Lambert & Reiss (2014:9) argues that fieldwork offers a unique circumstance that makes ’the learning experience … richer, more textured, memorable and even more vocationally applicable’. With the stated benefits of fieldwork within the geography curriculum it may seem surprising that

I am questioning the fitness for purpose of current dominant discourses. What appears to be missing or lost within this fieldwork curriculum is a focus on the geographical concept of interconnectedness; fieldwork to build relationships with the world.

2.6 The world as an object of study

The new geography curriculum foregrounds fieldwork rooted in the positivist tradition privileging a rational, scientific approach to education where the world is positioned as 'an object of thought rather than as a place of experience' (Lambert, Rawling, Hopkin & Kinder, 2012:7) and thereby creating a dualism between cognition and experience. This split is problematic as it separates knowledge of the world from the immediacy of first-hand place encounters with learning in geography situated increasingly as disembodied, virtual and abstract (Cook, 2006; Cook, 2011). The technicist agenda within the key stages 1-3 National Curriculum of England (DfE, 2013) currently encourages highly structured and teacher directed fieldwork practices. This approach to fieldwork provides a static, objective account of the world for children. It reduces the opportunities to venture into the unknown and to allow knowledge to emerge. There is research evidence from secondary geography teachers that indicate that concerns over the 'risk' of venturing out into the world and student behaviour have resulted in teachers feeling they need to visit controlled environments and exert authority in order to keep their children safe (Cook, 2006).

Technicism foregrounds fieldwork as a science of observation; extending our knowledge about the earth depends only on what we can observe. Job (1996:26) suggests that 'verifiable truth is achieved by experimentation and measurement using the physical senses and the technology that extends them'. Whilst Phillips & Jones (2013) recognise that learning in the field rarely leads to the kind of generalisations and truth statements to be found in science. To make scientific assumptions about

places is misleading as the reality is often more complex as interpretations of the world differ from ‘different vantage points in space and time’ (Daniels, Sidaway, Bradshaw & Shaw, 2012:2). Within a technicist approach teachers provide planned fieldwork experiences that develop students’ knowledge of the world through testing, observation and description (Nundy,1999).

The curriculum (DfE, 2013) proposes fieldwork that is grounded in a mechanistic worldview. The underlying problem with this lies with the ‘cartesian tendency’ that positions humans as subjects in a world of objects – or as geographers in an inert and passive world waiting to be studied (Puttick et al, 2017:175). The world is positioned as having real objective existence, independent of the observer. The world is viewed as an object that can be known. This ‘calculative thinking… positions the earth and its resources as ours [humans] to own, consume, and study at arm's length’ (Puttick et al. 2017:173). The whole world is viewed as a sum of the parts (Job, 1996: 24-25), whereby knowledge is seen as a product of the mind. Cook (2011:72) suggests this kind of fieldwork can be limiting as it creates ‘an eye for a problem not an eye for a country’ offering a simplistic view of knowledge as value free, static and fixed. This humanistic view may alienate some learners from the physical world and does not support their understanding of fieldwork places as a ‘phenomena of experience’ (Relph,2008:44). Puttick et al. (2018:173) points out this kind of geography ‘is quite different to what geography is to young children’. The work of Skar, Gundersen & O'Brien (2016:527) shows ‘that free and spontaneous play functions as a key to more bodily, emotional and sensuous interaction with nature in contrast to when children are engaged in numerous planned activities.’ In task led, outcome driven fieldwork accounts of experience can become disembodied. It is through getting lost amidst current conceptions of geography fieldwork that a new path reveals itself.

This thesis seeks to explore an expanded view of fieldwork that could offer more sophisticated understandings regarding the ways that geographers may come to know a more-than human world. It experiments with alternative thinking about geographical fieldwork that is complementary, but qualitatively different to the existing fieldwork conceptions within the curriculum and ways of being with the world. In making space for possibilities this exploration hopes to open conversations within the primary geography education community about emergent, place responsive approaches which may lead to 'engaged pedagogical action' in the future (Pinar, 2012:37). Through curriculum deliberations and pedagogical considerations, I hope to gain an insight into how a relational dimension can nurture learners' participation and connection to places helping to bring them into relation with the complexities and messiness of the world.

2.7 Geographical fieldwork: an educational project

Lambert (2003:47) suggests it is important that geography is 'not to be mistaken for an end in itself, but to be seen as a means to serve educational ends.' It is perhaps worth considering briefly the educational purposes that underpin geographical fieldwork. Dominant policy discourses within the current National Curriculum requires that 'pupils will be taught … to use fieldwork to observe, measure and record' (DfE, 2013). This approach may not promote a geographical education as it disconnects children from the education process, instead it might be viewed instead as planned enculturation or training. Informed by the work of Osberg (2005) and Osberg & Biesta (2008), I suggest that the current statutory orders promote the idea that 'knowledge is representative of the real, relatively stable and can therefore be transferred from A to B, in particular from one mind to another' (Osberg & Biesta, 2008: 314).

The National Curriculum conception of fieldwork as technical frames teachers' expectations that geography fieldwork within the curriculum should be adult led. It

suggests the fieldwork site has a functional role and places children in a passive role waiting to be filled with knowledge from the 'expert' teacher. Such a teleological conception of fieldwork may restrict opportunities to become lost, to wander off the path or to go wrong. There is little room for surprise or discovery. With performance tracking through assessment and data teachers tend to know where learners are in terms of progress at all times; there is security in the known.

This approach to learning in the field clearly places the power in the hands of the teacher as an expert guide (Rancière, 2004). It establishes 'a pedagogy in which the teacher knows, and students do not know yet' (Biesta, 2010b:45). Fieldwork becomes a 'guided tour' (Lenon and Cleves, 1994:6) or fieldwork as observation (Kent, Gilbertson & Hunt, 1997). These approaches are dominated by teacher exposition, note taking, question and answer sessions to check understanding and field sketching (Kinder, 2013:183). They are an efficient and effective way for teachers to transmit information quickly and directly and for the teacher to achieve successful outcomes in terms of knowledge acquisition (Kinder, 2013). However, these methods are not always guaranteed to achieve the anticipated outcomes. As Kinder (2013:183) explains 'no matter how enthusiastic and engaging the speaker, the reliance on listening and the relatively passive role of the learner can lead to low degrees of engagement'. The principal problem is that the students are only required to 'be there' with the result that their attention may actually be elsewhere' (Kent et al.1997: 315). As a result of this passive positioning of learners, outcomes may not be met, and the geography educator may be considered to have failed in their responsibility to educate; this type of education limits the meaning that can emerge from local fieldwork spaces.

It is worth noting that within schools there is often more nuance within fieldwork practices in the enacted geography curriculum. Many teachers embrace their roles as

‘curriculum makers’ (Lambert,2011) to make the most of the given freedoms within the curriculum (DfE, 2013). Experiments with fieldwork processes that have unpredictable outcomes have been undertaken (House, Lapthorn, Moncrieff, Owens-Jones, & Turney, 2012; Witt, 2013) and the A level independent investigation has led to the exploration of more creative methods to develop geographical fieldwork practices (Maddison & Landy, 2018). Cook (2011:74) noted that it is ‘a potentially exciting time for the future development of geography fieldwork’. Many teachers have been praised for engaging with ‘imaginative and inspiring practices in the field’ (Phillips, 2012:78). These practices acknowledge the ‘pedagogical possibilities’ of place (Payne and Wattchow, 2009:25) and are sensitive to children as ‘contributors to our shared knowledge and understanding of the world rather than as recipients and ‘beneficiaries’ of ‘hand-me-down’ curricular’ (Catling and Martin, 2011:332). My readings regarding fieldwork practices has made me consider who decides what aspect of the site is worthy of investigation, who decides what direction the learning will take and whose knowledge is considered most valuable.

2.8 Crossing boundaries

Notions of fieldwork are contested, and the term means ‘different things to different people in different times and places’ (Phillips & Jones, 2013:5). Although a structured, reductionist type of fieldwork is promoted within the National Curriculum, it is generally recognised that ‘after a period of decline geographical fieldwork is coming back to life with exciting and original fieldwork emerging outside formal education’ (Phillips, 2012:78). Much adventurous work has occurred within environmental education, for example gnome tracking (Payne, 2010), troll tracking and chasing pixies (Waters, 2014) and within place-based education (Sobel, 2008). In geography, the Geography Collective (2010:196), who describe themselves as ‘a bunch of Guerrilla

Geographers' including 'geography explorers, doctors, artists, teachers, activists, adventurers' who 'think it's really fun and important to get exploring and questioning the world', have shown it is possible to take an original approach to fieldwork.

There are many different geographical practices in the field, as figure 6 reveals (Kinder, 2013). They range from teacher led activities to heuristic pupil centred approaches varying in emphasis regarding different modes of learning.

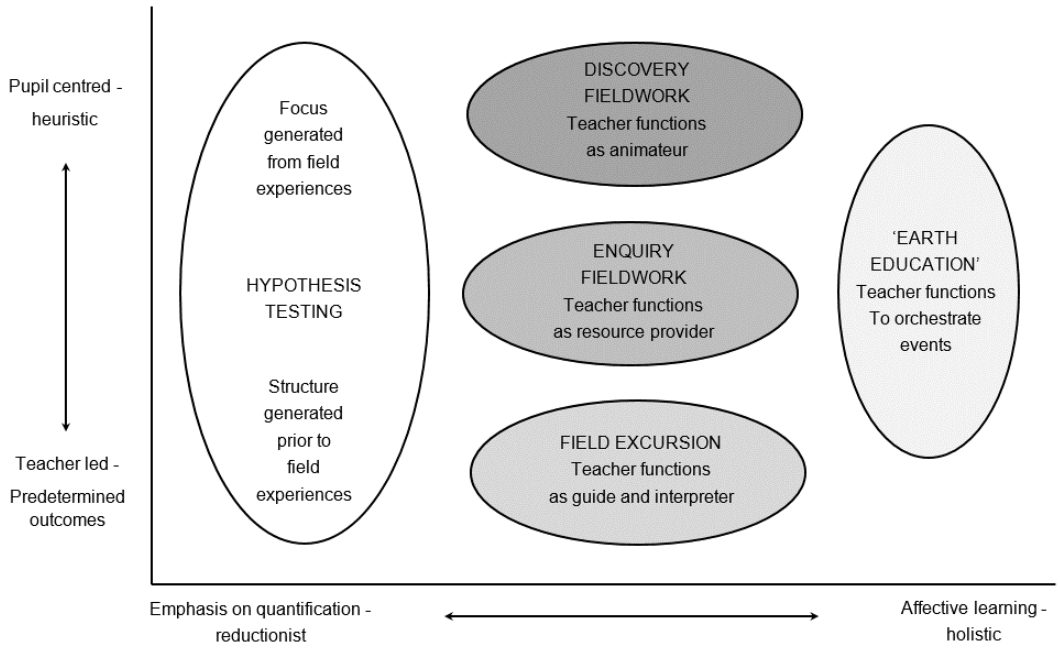


Figure 6: A classification of fieldwork activities (after Job 1996, in Kinder, 2013:183)

I seek to find a way to return to the roots of geography as 'a discovery subject' (Geographical Association, 2009: 23) bringing the geographer/child and the physical world into relation. A relational geography sees the purpose of geography within the National Curriculum for England (DFE, 2013) reimagined to inspire in pupils a curiosity and fascination *with* the world and its people rather than 'a curiosity and fascination about the world and its people that will remain with them for the rest of their lives'. This (re)purposing places children and teachers *inside* the world.

Currently, the geography curriculum portrays the world as 'a biophysical entity' that separates humans from the physical world (Catling, 2014: 245: [online]). Stewart (2012) argues that this artificial separation of 'human' and 'physical' has led to 'a schizophrenia within geography' as this position does not reflect reality where 'the human world is controlled and constrained by the physical world just as the physical world is influenced and altered by the human world'. This separation is made explicit within the National Curriculum (DfE, 2013) for the youngest children at Key Stages 1 and 2. There is recognition that as pupils progress to Key Stage 3 their growing knowledge about the world should deepen their understanding of the interaction between physical and human (see appendix 1). I would question the necessity to create a distinction between the physical and human in the children's early experiences of geography as there is a danger that disciplinary knowledge does not connect with the learner's experiences (Lambert, Rawling, Hopkin & Kinder, 2012). It creates an unnecessary, and perhaps a false dichotomy and is problematic denying children the opportunity of being with the world. As Macfarlane (2015:315) points out:

> '[T]o a three-or four -year-old, 'landscape' is not a backdrop or wallpaper, it is a medium, teeming with opportunity and volatile in its textures…What we [adults] bloodlessly call 'place' is to young children a wild compound of dream, spell and substance; place is somewhere they are always *in,* never *on' [author's own emphasis*].

I propose geographical fieldwork that honours this different order - that respects the 'intricacies' and 'richness' of the multiple ways children encounter places which Macfarlane (2015: 317) refers to as 'childish'. A commitment to broaden thinking with place is required in order to invite heterogeneous understandings of the world that

enrich the subject of geography – making it seemingly boundary-less (Angus, Cook & Evans, 2001).

2.9 Fieldwork as place event

My theoretical thinking around the concepts of place and space are informed by cultural geographer Doreen Massey's work (2005). Massey (2005:119) suggests place is a 'bundle of trajectories' of living and non-living things that come together to comprise that place. This emphasises the situatedness, and specificity of each fieldwork experience. I propose fieldwork as a place event which recognises the dynamism of a world that is constantly changing. Place is a convergence of the more-than-human/human - 'a simultaneity of stories so far' (Massey, 2005:9). Geographers are placed in the midst of fieldwork spaces emphasising the holism of their experience not separating out the cognitive, physical, social, cultural and aesthetic dimensions of work in the field. Space is seen as emerging 'constituted through interactions, from the immensity of the global to the intimately tiny' (Massey, 2005:9). Fieldwork spaces are experienced through multiplicity and this heterogeneity can present both opportunities and tensions that need sensitive negotiation with and between the more-than-human and human. Massey (2005:139) suggests when humans interact with places 'here is no more (and no less) than our encounter, and what is made of it. It is, irretrievably, here *and* now. It won't be the same 'here' when it is no longer now' (Massey, 2005:139). She positions fieldwork spaces as always under construction – 'always in the process of being made…never finished; never closed' (Massey,2005: 9). Fieldwork is performative with the materiality of the place in the moment. To access this contingent way of knowing places geographers must 'not hide behind too formal a fieldwork methodology' (Phillips & Jones, 2012:190). Geography educators need to pay attention to the nowness of fieldwork events, spaces and times. Fieldwork

conceptualised as a place event is not found within the prescribed content of curriculum. An outcome led syllabus with pre-packaged knowledge does not provide opportunities to explore emergent knowledge. As Johnson (2017:26) points out 'if you search for the holy grail of particularity …you may miss the chalice freely offered filled full and overflowing'.

Relational fieldwork needs to be explorative and not fixed as a learning outcome. It is place responsive and embarked upon as an adventure with no predetermined outcomes - a fieldwork of wandering with a 'conscious step and an openness to experience' (Johnson, 2017:21) in order to broaden and expand geographers' perspectives. Relational geography values immersive encounters that foster attention and attunement to local contexts and conditions. This approach provides possibilities for knowledge to emerge through movement and actions within landscapes that invite participation. It brings uncertainty into engagements within fieldwork spaces requiring participants to open themselves up to the mystery of the possibility of all things (Hart, 2001). This fieldwork encourages geographers to 'embrace mystery rather than assert mastery' (Macfarlane, 2017: [online]). I aim for knowledge in both head and heart (Van Matre,1990), whilst also hoping to engage students with a spiritual dimension inviting them to consider the beauty, mystery and magic of the natural world. This is not an approach that will be welcomed by all. For example, humanistic geographer, Yi Fu Tuan (2001:42) refers to these kinds of fieldwork visits as 'casual outings' and states that they had never made him 'wiser or even more knowledgeable'. Nairn (2005) points out that unmediated direct experience may help to reinforce learners' misconceptions and is critical of the uncontested notion of truth through students' lived experiences. Yet Dewey (1916) suggests that flexible purposing can open rich, deep and genuine

encounters between humans and the world and allows for an approach that values spontaneity, playfulness and intuition.

Fieldwork improvisation is a risky approach as by its very nature the outcomes are ‘inherently unpredictable’ (Kinder, 2013:187). This has been described as working ‘on the edge of chaos in the dynamic between stability and instability’ (Tosey, 2002:4). Yet this emergent fieldwork approach can be creative because with every interaction and new meaning that emerges something uniquely new is created; something which is beyond our ability to predict or control (Manson, 2001:410). An over emphasis on the desired learning outcomes in geography may have the potential to limit children’s interactions with the world.

Whereas relational geographies provide geographers with possibilities to respond to the uniqueness of fieldwork spaces and the ‘throwntogetherness’ of each site (Massey, 2005:140), this is not about replicating knowledge that already exists rather it invites geographers to flourish through engagement in the world. This enables learners to ‘continuously bring new beginnings into the world’ through their actions and therefore engage in the complexities of the world which exist within a ‘web of plurality’ (Biesta, 2014:105). This risky fieldwork encourages multimodal engagement with the world in which geographers come to know the world in multidimensional ways: physically, intellectually and emotionally. An emergent fieldwork uses the subject of geography as a way of seeing, being and knowing places. Geographical fieldwork as an ‘event of place’ (Massey, 2005:140) recognises fieldwork spaces as temporary, dynamic and original constituted in the moment around a ‘constellation of processes in movement- this is place as open and internally multiple’. It challenges dualisms acknowledging pluralistic ways of knowing, thinking, and being.

2.10 Curriculum making possibilities

A possibilist interpretation of the geography curriculum (Lambert & Hopkin, 2014:64) seems to provide teachers, who are interested in relational approaches to geography, with an opportunity to seize the moment, navigate through the curriculum's technicist agenda and think differently about fieldwork practices. The National Curriculum (DfE, 2013) 'is just a list' describing what to teach (Catling, 2013b:361) and so offers teachers some freedom to engage in curriculum making to transform the curriculum into 'coherent, challenging, exciting and enjoyable opportunities for learners' (Geographical Association, 2009). Kidd (2015:11) suggests teachers need to be courageous in their curriculum planning by 'becoming Mobius' that is existing both within the linear culture of performativity and technicism, whilst at the same time 'subverting the notion of linearity and developing a tolerance for uncertainty'. By engaging in the complex systems of education in a creative and critical manner, practitioners can find 'modes of resistance which allow us – to exist in the between spaces of one AND another in order not only to survive but also to thrive' (Kidd, 2015: 10).

A relational approach nurtures fieldwork that pays attention to the way in which children and teachers co-create their knowledges with fieldwork spaces. This thesis seeks to travel with ideas and geographical practices where participants engage with place responsive pedagogies within emergent, immersive, nonhierarchical fieldwork spaces. This is a notion of geographical fieldwork in its nascent state that offers possibilities to rethink curriculum and pedagogy. The theoretical perspectives are explored in Chapter 3 where the prospect of transformation is considered through an alternative conception of fieldwork – an opportunity not to know 'about' a place but to know 'with' places.

Chapter 3 ~~Theoretical Perspectives~~ Opening the crack in the here and now

'I will not follow where the path may lead,

but I will go where there is no path, and I will leave a trail.

Infinitely will I trust nature's instincts and promptings…'

(Strode,1903:505).

3.1 Embracing an enchanted research ethos

Within this chapter I seek to explore the academic theory that has underpinned my ponderings of relational democratic fieldwork spaces. I have engaged with a multiplicity of literature rather than focusing on one theorist or theory in order to be open to the thinking of those who have worked at the edges of feminism, posthumanist, indigenous and academic geographical studies. These readings have offered a glimmer of hope against a backdrop of accountability, performativity and a knowledge-based geography National Curriculum provision for schools (DfE,2013) encouraging 'a less repressed, more cheerful way of engaging with the geographies of the world' (Woodyer & Geoghegan, 2013:196). This literature has inspired me to seek out openings and possibilities that have become a form of hope– a hope that 'opens the crack in the here and now' (Anderson 2006:705). They have focused my attention on the 'margin of maneuverability' (sic) (Massumi, 2002:211-212) that is present for curriculum making within the school curriculum.

I have embraced Woodyer and Geoghegan's (2013:196) spirit of enchantment within research in order 'to explore rather than judge' the ideas I meet within the literature (Gibson-Graham, 2008:620). I explore with delight and wonder - drawn to readings about liveliness, openness and surprise, seeing deep and powerful affinities emerge which have informed the theoretical underpinning of my thinking (Geoghegan & Woodyer, 2013). I hope by embracing an enchanting research ethos I will steer away

‘from the paralysis often experienced in the face of repressive cultural narratives’ enabling the study to move forward ‘with a positive energy and an attention to the exploration of alternate possibilities’ (Geoghegan & Woodyer, 2014:224).

3.2 Plugging the theory/practice divide

This thesis is my contribution to a call from Puttick et al. (2017) for a renewed debate about the aims and purposes of geographical education and a critical consideration for research within this field. The field of geographical education addresses questions and issues concerning the relationship between geography and education and the ways in which geography can contribute to education (Lambert, 2013). My study seeks ‘to open up new forms of political enquiry’ within this field based on engagement with theoretical perspectives that attend to the ‘interconnectedness of the human and more-than-human world’ (Taylor, 2011:432). Generally, within the field of education there is ‘a gap between what is understood as theory and practice’ which positions theory and practice in binary opposition (Lenz Taguchi, 2010:21). Lenz Taguchi (2010:21) explains:

> ‘For some this binary assumes the image of a visionary, rational, logical, clean and flawless theory’ and ‘a messy, dirty, disorderly practice, in need of being organised, cleaned up and saturated by rationales and visions of theory’.

Lenz Taguchi (2010) suggests this dualism is a view that is dominant for teacher educators and researchers. Whilst a dominant view for many teachers within school is that ‘practice constitutes a kind of truth, in itself, based on unformulated, unwritten experiences and tacit knowledge, owned and embodied by the practitioners themselves’ (Lenz Taguchi, 2010:21). This is a view that prioritises and values practice over theory. Since the publication of the white paper the Importance of Teaching (DfE,

2010) by the UK government there have been significant changes in the ways that Initial Teacher Education is being delivered in England (GA, 2015). Participation on school-based routes into teaching as an alternative to mainstream university provision has increased, which has implications for the types of theory and research that is promoted, valued and funded. Researchers are under pressure to make their work useful to teachers in classrooms by focusing on 'what works' and producing evidence-based research 'in line with centrally defined notions of 'effective teaching' and 'best practice' (Morgan & Firth, 2010a:90). This narrative seeks to impose particular ways of knowing and specific curriculum goals neglecting important questions about aims and purposes (Biesta, 2007).

Dahlberg & Moss (2010) refer to this as a reduction in the complexity and diversity of knowledge production, foregrounding 'atomism, pre-specification and control' of geography practices within the classroom (Morgan & Firth, 2010a:88). Researchers within geographical education have been accused of 'political conservatism and … apparent blindness to ideology' (Fien, 1990 in Firth & Morgan, 2010b:110). This omission has meant that there has been limited engagement with 'theory in general, and critical theory in particular' (Firth & Morgan, 2010b:111).

Within this thesis I hope to begin to address this by plugging theory into my geographical education research. Unger (2005:1) calls such resistance 'a dictatorship of no alternatives.' I set about problematising the constitution and production of knowledge by engaging critically with theory. I intentionally pursue an alternative to the current government research agenda for education. Whilst this may be seen as 'irrelevant' or 'useless' by some traditionalists, Whitty (2006:162) has suggested that 'a range of orientations to government policy is entirely appropriate for education research in a free society'.

As a geography teacher educator, I have been working within a field where debates over research philosophy and theory have been marginalised. There is a tendency to view theory as 'something esoteric and separate from research practice' (Firth & Morgan, 2010b:111). As both a teacher and a teacher educator who has worked in schools and Higher Education, I do not find the separation of theory and practice helpful. From my experience, the placing of theory and practice in binary opposition fails to acknowledge that 'practice is in fact continuously and *already* doing and practising educational theories, whether we are aware of it or not' (Lenz Taguchi, 2010:21). Bringing together thinking and practising is not easy. Thinking about geographical practices through theory can create tensions. Through my study I have tried to make these explicit as I speak and perform theories and ideas into practice (Lenz Taguchi, 2010). But plugging theory into geographical practices seems to offer possibilities to 'produce 'newness of ideas, newness of research practices and newness of pedagogies' (Kuby et al. 2019: 4).

3.3 Lost in the post (Lambert,2009)

My study has been inspired by posthumanist theoretical perspectives. In seeking a relational geography that emphasises connection between physical and human, posthumanism offers possibilities to 'extend, expand and disrupt received wisdom' (Kuby et al. 2019:2). It shifts the focus regarding more-than-human/human relations transforming fieldwork spaces from being sites of knowledge extraction and skills practice to sites of animation, engagement and involvement. This transformation may nurture a deep and profound personal sense of place; a sense of being in relationship with place. Sense of place is not made explicit within the National Curriculum geography documents but is emphasised within Ofsted (2011) requirements for high quality geography fieldwork (Owens, 2013). However, as Owens (2013) suggests a

rigorous geographical knowledge that is not underpinned by physical experience, immersive encounters and engagement of the emotions will lack an empathetic understanding of the complexity and messiness of the real world (Owens, 2013).

It is worth noting that there is not one single definition or universal understanding of posthumanism. As Taylor (2016a:6) points out 'posthumanism is a mobile term… a constellation of theories, concepts, approaches and practices.' As posthumanism can stand for a range of 'different perspectives and positions' there is not one unified approach to posthuman geography (Castree & Nash, 2006:502). My thinking has been informed by academic geography where, despite disparate critical approaches, there appears to be a lively tradition of work that incorporates posthumanist notions of 'humans as enmeshed 'with' rather than 'outside' non-human nature' (Head & Muir, 2006: 510). This work includes explorations with gardens (Longhurst, 2006), animals (Philo & Wilbert, 2000) and notions of hybridity (Whatmore, 2002).

To the best of my knowledge posthumanist approaches have not yet been applied within geography education in general and have not been explored more specifically within geographical fieldwork. Given fieldwork is action orientated, concerned with situated knowledge and seeks to attend to the material elements within a place, it is perhaps surprising that posthumanist approaches to geographical education have not been more forthcoming. One reason for this absence may be a disciplinary reticence to engage with philosophies that complicate and question geography educators' allegiance to knowledge production through social constructivism. In fact, within geography education resistance to the 'posts' has been articulated rigorously. Lambert (2009:3) in his inaugural professorial lecture suggests 'Geography in education is 'lost in the post' and urges stern resistance to what he calls 'post-disciplinary new orthodoxies in schools'. Lambert (2009:7) believed that Geography, along with other

subjects, suffered from ‘a collective loss of faith in the grand narrative’ of subject disciplines.

Posthumanism seems to have little respect for traditional disciplinary boundaries (Castree & Nash, 2004:1344) and it is easy to understand how geography educators could view this as a threat to the identity of their subject discipline. Considering fieldwork through posthumanist perspectives plays at the boundaries of the subject discipline, offering possibilities for interdisciplinary and transdisciplinary work. For some ‘self-appointed disciplinary guardians’ (Fien, 1999:141) this approach will be unacceptable. They believe that ‘boundaries are a pre-condition of meaning and also the basis of knowledge. Distinctiveness provides inherent value’ (Standish, 2013). As a primary practitioner, working in cross-curricular ways across subject boundaries does not feel threatening. Working holistically invites complexity into the curriculum to nurture connections and understand interrelations. This desire for geography with clear boundaries between educational/non-educational activities and geographical/non-geographical knowledge is not new (Fien, 1999). A securely bounded geography suggests a protective, safe and defensive stance to deliver a body of centrally driven universal geographical knowledge. A narrow boundaried view of geography does a disservice to those who conceive geography as ‘a living, breathing subject, constantly adapting itself to change’ (Palin, 2018: [online]); one that examines ‘the relationships between seemingly separate disciplines to make sense of what they see’ (Esner, 2018: [online]). A posthumanist geographical perspective is risky and fraught with difficulty, yet the unruly nature of posthumanism matches the messiness of the real world. Working in disciplinary borderlands rejects the idea of a ‘single linear narrative’ of a place and reveals a world of multiple and contested meanings that provide ‘a potential source of experimentation, creativity and possibility’ (Giroux,1991:63).

3.4 Ethico-onto-epistemological becomings

Barad (2007:136) points out that a posthumanist perspective does not presume the 'separateness of any-'thing''. So, whilst I have considered discretely notions of posthumanism, relational ontologies, new materialism, agency, entanglement, assemblage and intra-action, I view them as inextricably linked within the thinking/doing/being of research/practice. In experimenting with these ideas, I hope I have manged to grapple with these challenging concepts and honour the posthumanist view of interconnectedness. I have tried to respect the notion that 'everything is connected and affects everything else in a state of *one-ness'* (Lenz Taguchi,2010:39). To do this I adopt an ethico-onto-epistemological approach to my work to accommodate new ways of relating to the world through post-humanist/new materialist geographical fieldwork.

Ethico-onto-epistemological thinking is inspired by the writings of Barad (2007:185) who suggests 'an appreciation of the intertwining of ethics, knowing, and being'. This entanglement marks a difference in the way geographers think and do geography. Drawing on quantum physics and critical social theories, Karen Barad (2007) suggests knowing and being are mutually implicated and this requires a fundamental reworking of concepts such as matter, agency, power and subjectivity. Posthumanism seems to offer possibilities for transformation of geographical education, thought, practice and research through the creation of spaces of experience in which reciprocal relationships form the basis for discussion, dissent and growth.

3.5 Geography: a human project

Bonnett situates the subject discipline of geography as a subject with 'a rich intellectual heritage' producing authoritarian knowledge that humans need in order to thrive and survive (Bonnett, 2008:39). Other geographical education scholars suggest

other purposes for a geographical education e.g. global democratic citizenship (Gaudelli & Heilman, 2009), human empowerment through capabilities (Lambert, Solem & Tani, 2015) and knowledge (Standish, 2013). Bonnett (2012:39) states that 'geography is a fundamental human project'; it is 'one of humanity's big ideas. Without it we are lost'. This notion places 'the figure of the human' and 'the making of better humans' at the centre of geography education, which is also true of most curriculum projects (Gaztambide-Fernández, 2015:245). Geography foregrounds the idea that 'to be human is to be always central to ways of knowing the world' (Malone, 2015:8). In rethinking fieldwork, I recognise that humanist geographers are generally interested in place as a fundamental, universal aspect of human experience and subjectivity. They have tended to situate place as the centre of human experience and meaning (Relph,2008). This approach by some geographers has been criticised for 'continuing to overlook the multiplicity and uniqueness of places' (Major, 2010:90). A humanist tendency has dominated and restricted geographical education privileging human matters as the most important. As Major (2010:90) points out 'places can be sites of exclusion and oppression where uneven power relations are played out'. It is perhaps worth acknowledging here that 'humanism…never was (or is) singular' (Taylor, 2016a:90). Indeed, as Braidotti (2013:50-51) points out 'there are in fact many humanisms.' This study heeds Snaza et al. (2014:4) warning to be mindful that engaging with the human is always problematic within curriculum studies.

Relational geographical fieldwork informed by posthumanism will seek to decentre the human within geography education. Yet 'as soon as we express the desire to 'overcome humanism' we very quickly realize how utterly entwined we are' (Taylor 2016a:9). Anthropocentrism has placed the geographer at the centre of fieldwork spaces and at the centre of the conversation when 'in fact humans are not

the centre of the universe. Indeed, we should not be centre of the conversation' (Snaza and Weaver, 2016:4). Anthropocentric thinking and experiences have tended to set up a series of binary oppositions. The binaries may include more-than-human/human, self/other, natural/cultural, inside/outside, subject/ object, mind/body, human/physical, cognitive/emotional. Through experimenting with ideas, I seek to grapple with some of these binaries as they exist within fieldwork practices. Although I recognise that 'the world in its 'messy heterogeneity' (Whatmore, 2002:147) often turns out 'to be more complex and nuanced than any such clear divisions allow' (Murdoch, 2004:1357). As Badmington (2004: 1345) suggests 'binary oppositions are never as certain as they seem'. In order to do justice to the way of the world humans cannot cling on to these anthropocentric binary assumptions (Whatmore, 2002).

Perhaps it is time to interrogate the notions of human exceptionalism within geography education to suggest that, instead of being separate or superior humans exist within 'complex matrices of human and nonhuman relationships so traditional hierarchies come to be progressively dissolved' (Murdoch, 2004:1357). This question has made me consider what is left out of the 'fold of knowers' (Murris, 2016:46) in geographical fieldwork if we rely solely on humanist orientations to research and pedagogy? Binary thinking is something I am grappling with throughout my thesis. Posthumanism situates the geographer within the liveliness of fieldwork spaces. It positions them as 'being with the world… realising that the relation is always already there' and is influenced as much by the 'behaviour and existence of other co-existing species as by … [humans] intentional and unintentional actions' (Rautio, 2013a: 448).

Posthumanism is not necessarily a rejection of humanism or an anti-humanism (Braidotti, 2013). Indeed, I do not wish to establish a binary situation and acknowledge that 'many of the desires and imperatives of humanism are admirable' (Wolfe, 2012:

[online]). This study does not seek a removal of the human. Wolfe (2012: [online]) acknowledges that 'posthumanism is linked very integrally to humanism'. In fact, I would suggest it is impossible to remove the human from education and from research carried out by humans. Badmington (2004: 1349) writes that 'humanism may be acknowledged, but not accepted. No simple story is enough, no single position just'. I am interpreting the 'post' of posthumanism to be 'what exceeds rather than what comes after the human' (Whatmore, 2004:1361). This study seeks to shift geographical fieldwork spaces from places of 'human centrings' to places of 'posthumanist profusion' (Taylor: 2016a:6).

3.6 Geography: a conversation about earthly things

Posthumanism perspectives within geography offer researchers and educators the potential 'to contest the arrogance of anthropocentrism and the exceptionalism of the humans' (Braidotti, 2013: 66). In seeking to create relational fieldwork spaces for this study I wish to broaden the current object based, human centred definitions of the subject discipline of geography as underpinning 'a lifelong conversation about the earth as the home of humankind' (Geographical Association, 2009:5). I would like to establish a fieldwork space where the agency of the world is recognised and seek to build principles of mutuality and reciprocity in respect to the more-than-human elements, what Val Plumwood (2002: 154) calls 'Earths Others'. This definition might then consider that the discipline of geography underpins a lifelong conversation about and with earthly things. Originally, I was troubled by the word conversation as I wanted to acknowledge the multiple ways of responding within a more-than-human world. I was concerned that conversation may privilege language and was aware of postmodern concerns that 'language has been granted too much power' (Barad,

2007:132). But the etymology of the word conversation, originates from Middle English and refers to living among, being familiar with and intimacy.

Considering the world and its material things 'in conversation' may require a fundamental shift in our sense of who we are as geographers in relation to our planet. Postmodern geographical literature emphasises the importance of attending to 'more-than-human' elements within a site (Whatmore, 2002; Hinchcliffe, 2007). It is a view that has been informed by the work of sensory ethnographer Sarah Pink (2011) who emphasises the need to acknowledge the materiality of places. She proposes an understanding of places as composed of entwined components of an environment, which include 'geological forms, the weather, human societies, material objects, buildings, animals and more' (Pink, 2011:349). This view of geography would require a fieldwork that did not require the world to be observed, measured and recorded, but would seek to (re)establish ties with landscapes and recognize the multi-layered sets of relationships that can exist between children, teacher, environment and curriculum subject. Relational posthumanist fieldwork is speculative and 'affirmative' (Braidotti, 2013). It is a hopeful ontology built on the emergence of more-than-human sociality (Tsing, 2013) within fieldwork spaces where the 'self' becomes integrally non-unitary, relational and complex – a relationality that is affirmative, not based on shared vulnerability' (van der Zaag, 2016:333).

3.7 A posthumanist profusion

This posthumanist geographical fieldwork is 'anchored in an appreciation of human positionality and projects (the world with us)' (Bennett, 2016:59). It shifts us from a transcendent ontology where 'we', as human subjects, are established as part of a hierarchy within which we are separated from the world around us (Jackson & Mazzei, 2012:90) to a relational, immanent ontology (Deleuze,2001). Immanence is a

philosophical perspective which ‘presumes that all of reality exists within (or more properly ‘of’) the world and that all things exist without a pregiven (transcendent) form or conceptualisation’ (Clarke & Mcphie, 2016:1004). This ‘plane of immanence and univocality’ (Deleuze & Guattari, [1988]/2013: 297) repositions geographical learners ‘within a world that is much bigger than us (humans) and about more than our (human) concerns’ (Taylor, Blaise & Giugni, 2013:49). Yet this approach remains ‘committed to human needs and perceptual scales, social justice and a notion of human becoming’ (Braidotti, 2013:29). For Bennett (2016:61) suggests a posthumanism that ‘yearns for the ascendancy of the non-human is of limited use for studies of human education’.

Within this emergent ontology everything - human and non-human - exists in a state of emergence and relationality; an emergence that has the potential of transformation leading to a process of what Deleuze and Guattari (2013:271) refer to as ‘becoming’. Posthumanist fieldwork spaces are places of becoming. They are experimental spaces in which ‘a multiplicity of thinking and doing coexist, always under construction’ (Davies, 2014: xii). These spaces and the things within them are in continual transformation – continually in the making and continually proliferating. Donna Haraway (2008:25) refers to becoming-with as ‘a dance of relating’ with a host of different entities and beings, not all of them human.

Adopting this relational philosophy infuses geographical explorations with feelings of ‘ecological awareness’ (Morton, 2007) of our interdependence with other beings. Fieldwork spaces act as places where the more-than-human/human elements form a community of ‘bodies, objects, materialities, affects, sensations, movements, forces’ (Taylor,2016a:20). Geographers move into relationships with and amidst a ‘multiplicity of ecologies/beings’ where they come to develop a ‘shared sense of the world’ (Malone,2018:47); this view situates geographers as ‘being-of-the-world’

(Barad, 2007). Fieldwork spaces are then conceived as places of evolving encounters that attend to 'the livingness of the world' (Winterson, 1997:85). This is more than a 'purely cerebral activity' rather 'a modality of connection between bodies, including human bodies, and geo-physical world' (Whatmore, 2006:603). Bodies and senses are always 'taking place' within an interrelationship of a mind-body environment (Howes,2005:7). Posthumanism shifts geographical education from questions of human knowing toward questions of geographical knowing/ becoming/doing in relation to an assemblage of things within a lively world.

3.8 Thinking with assemblages

The notion of assemblage is increasingly being used within the humanities and social sciences (Kennedy, Zapasnik, McCann & Bruce, 2013; Anderson, Kearnes, McFarlane, Swanton, 2012). Assemblage thinking is well established in fields such as archaeology, art and the natural sciences. Within my study I seek to embrace the Deleuzian-Guattarian idea of assemblages which has informed recent scholarship on assemblages within geography (Anderson & Harrison, 2010), material culture (Coole & Frost, 2010) and political theory (Bennett, 2010). The assemblage should be celebrated for its theoretical malleability (Anderson and McFarlane, 2011:126). With a Deleuzian and Guattarian perspective (2013) assemblage is not viewed as a static collection of objects, but as 'an ongoing *process* of arranging, organising or congealing *how* heterogeneous bodies, things or concepts come 'in connection with' one another' (Kennedy et al. 2013). So, the focus is on movement rather than stasis and the processes of composition as often disparate 'bodies, things and ideas assemble, disassemble and reassemble in fragmented and creative ways' (Gannon, 2016: 132).

The notion of assemblage honours difference. As Anderson et al. (2012:180) suggest 'what assemblage thinking allows for' is an understanding of how 'a world

populated with a motley array of entities with differing properties and capacities… are capable of acting and making a difference'. Assemblage thinking also values the 'juxtaposition of distinct elements' for its transformative potential generating 'new entities, new possibilities and new ways of understanding' (Hamilakis & Jones 2017:79). The use of assemblage has proved useful as a conceptual territory for academic geographers (Anderson et al. 2012), particularly Macfarlane (2011) who explored the city as a collective of processual, relational, mobile and unequal assemblages. It will be interesting to consider the mixes of activities, ideas, materials, things, forces and intensities that emerge from the notion of 'place as assemblage' (Duhn, 2012:99) and to explore how fieldwork spaces can open up new potentials for expression, action and geographical knowledge in the making.

3.9 The materiality of fieldwork spaces

In considering the more-than-human/human connections within fieldwork assemblages I situate my posthumanist work within a 'new materialisms' approach. New materialisms encourage us to 'think differently about matter' (Coole & Frost, 2010:7). It rejects an understanding of the fieldwork space as full of solid, bounded objects whose movements and behaviours are predictable, measurable, controllable and replicable. This approach situates matter as inert and discrete and positions humans in a hierarchical position as exceptional, separate, rational beings - 'a thinking feeling seeing self' (Taylor, 2016a:10). Whatmore (2002:117) suggests this is a 'familiar, long-established commonsense' account of the world. New materialisms embrace an alternative account of the lively immanence of matter. As Coole & Frost (2010:9) explain 'materiality is always something more than 'mere' matter: an excess, force, vitality, relationality, or difference that renders matter active, self–creative, productive, unpredictable'. This view conceptualises the fieldwork space as generative

and emergent in the moment. The assemblages in formation within fieldwork spaces can be viewed as 'agentic, with multiple nonhuman as well as human sources of agency with capacities to affect' (Taylor & Ivinson, 2013: 666).

In the footsteps of academic geographers, (Hinchcliffe, 2007; Lorimer, 2005) I seek to take more-than-human materiality seriously in enacting the relocation of agency within geographical practices in the performance of fieldwork. It seems to be an area that is missing from geographical fieldwork research (Lambert & Reiss, 2014). Kraftl (2014:121) acknowledges that there is an 'absence of materiality in education', particularly in considering 'the role material objects may play in constituting particular learning atmospheres'. I seek to experiment with how geography fieldwork might be different if agency is no longer considered the sole property of humans. In taking Bennett's (2004:365) view that 'humans are always in composition with nonhumanity, never outside of a sticky web of connections or an ecology [of matter]' I understand a material turn within fieldwork will entangle both matter and meaning.

Barad (2007: 3) suggests 'matter and meaning are not separate'. Dolphjin and van der Tuin (2012:7) explain 'the material dimension creates *and* gives form to the discursive and vice versa'. Materials are agents that are actively producing discourses and realities (Lenz Taguchi, 2010). Like Andersson (2016:7) this study proposes to focus on 'the entanglement of matter and discourse rather than towards the materialistic components' of fieldwork spaces. For materiality is not separate, but dynamically produced: 'not a thing but a doing' (Barad, 2007:151). This is a 'process of materialisation that stabilizes over time to produce the effect of boundary, fixity, and surface that we call 'matter'' (Orlikowski & Scott, 2015:699). Practice is positioned as material-discursive. Barad (2003:822) explains that 'the relationship between the material and the discursive is one of mutual entailment. Neither is

articulated/articulable in the absence of the other; matter and meaning are mutually articulated.'

This posthumanist/new materialist approach sees geographical fieldwork as an ongoing, dynamic, relational process of emergent materiality; fieldwork practices that are constituted by both materialities and meanings. Political theorist Bennett (2010: 201) suggests the 'thing-ness of things' – bodies, objects, arrangements – are always in-the-making. It shifts fieldwork from representation and a focus on 'questions of correspondence between descriptions and reality to matters of practices/doings/ actions' (Barad, 2003: 802). It is hoped that opportunities to explore the 'ways in which meaning, and materiality are made' (Castree & Nash, 2006: 503). Kuby et al (2019:7) describe it as 'materialdiscursive unfolding of the world'. It is in geographical practices/ doings/actions within relational fieldwork assemblages that allow new imaginings for geographers and their encounters with the world. This posthumanist thinking 'changes what we think, what we feel, what we do. It makes a difference' (Murris, 2016:10).

3.10 Knowledge in the making

My study seeks to explore geographical knowledge as it emerges from being in, with, and of the world from a direct material engagement, 'a practice of intra-acting with the world as part of the world in its dynamic material reconfiguring' (Barad, 2007: 379). It is important to note that this is 'not about individual subjects autonomously forming and developing relations with the world' (Gough, 2016:160). Intra-activity provides opportunities to explore notions of congregational agency (Bennett, 2010) which 'refers to an idea that agency, an ability to act in a certain way …arises only as a result of gatherings of many kinds of things and beings, differing with each situation' (Rautio & Winston, 2015:6). Within fieldwork spaces intra-species co-merge with all things agentic and are brought into relation by intra-action (Rautio, 2013a, 2014), which leads

to co-construction of mutually constituted place knowledge. Rautio (2014: 462) explains the idea of intra-action:

> 'In interaction independent entities are viewed as taking turns in affecting each other, which implies that these entities are taken to each have an apriori independent existence. In intra-action…interdependent entities are taken to co-emerge through simultaneous activity to come into being as of certain kind because of their encounter.'

Knowledge emerges not from the specific properties of the things within the assemblage rather from 'how things are 'in-phenomena' that is 'being produced through a series of entangled relational possibilities' (with other objects and things) (Malone, 2015:8-9). So, agency resides within the intra-acting and it is 'about response-ability, about the possibilities of mutual response' (Dolphjin & van der Tuin, 2012: 55). Agency is 'doing' or 'being' in its intra-activity' (Barad, 2007:178) and is not always a straightforward process. Intra-activity is fraught with tension requiring actants to undertake careful negotiations in order 'not to deny but attend to power imbalances' (Dolphjin & van der Tuin, 2012: 55). Such attention shifts pedagogy from concern about 'intrapersonal and interpersonal relationships toward an intra-active relationship among all living organisms and the material environment such as things and artefacts, spaces and places' (Lenz Taguchi, 2010: xiv). Relationships are 'forged in an already-given space, relations are creative of spaces; they make spaces' (Clarke & Mcphie,2014:2002). Both human participants and active agents work together in co-constituting becoming-geographers, knowledge, realities and relationships within geographical fieldwork spaces. This is a hopeful and ambitious vision for geography. One that will require educators to 'embrace …the in-between spaces, the moments of

uncertainty, the complications and crossings that geography has often repressed' (Whatmore, 2004:1345).

3.11 Becoming other(wise)

A debate occurs amongst scholars regarding the idea of 'new' materialism (Monforte, 2018). This non-dualistic thinking is not new to geography. As early as 1925 Carl Sauer, an American cultural geography Professor, stated that 'Geographers should avoid considering the earth as the scene on which the activity of man (sic) unfolds itself, without reflecting that this scene is itself living'. My study reimagines geographical fieldwork within 'a larger-than-human multispecies community' (Harvey, 2013:2) opening up avenues to animistic ways of engaging with the world. Animism is a complex term and continues to be a label for a range of phenomena, but within this study refers to performative acts of engagement with other species placing relationships at the centre (Harvey, 2013). My study draws on the 'indigenous philosophical animism' of Val Plumwood which aims to engage western peoples in a critical rethink of dualisms or 'hyper-separation' (Bird Rose, 2013:94) acknowledging 'that the world is full of persons, only some of whom are human, and that life is always lived in relationship with others' (Harvey, 2006: xi).

Deleuze and Guattari's notion of becoming ([1988] 2013:323) – as in becoming otherwise- is a way 'to be-between, to pass between, [to act and be with/in] the intermezzo'. Working in dynamic, rhizomatic ways with notions of becoming opens possibilities for interconnections to embrace different ways of thinking (Sellars, 2013) and (re)conceptualising geographical fieldwork. In seeking to animate fieldwork spaces I explore how geographers may position themselves to be communicative beings, opening themselves up to 'earth's others as fellow agents and narrative subjects' (Plumwood, 2002:176). Educators seeking to adopt an animist approach will need to

consider how geographers can communicate with and be mindful of the more-than-human within fieldwork sites. They may consider how to embrace a pedagogy that presents the 'world as multi-vocal, important, diverse, and deserving of respect' (Blenkinsop, Affifi, Piersol, De Danann Sitka-Sage, 2017). As Plumwood (2009:121) suggests a philosophical animism 'opens the door to a world in which we can begin to negotiate life membership of an ecological community of kindred beings.' There are different ways of coming to know a fieldwork site. Relational geographical fieldwork is ontologically and qualitatively different from ways of knowing in the curriculum. This is not knowing from a distance, for Barad (2012) suggests proximity matters to foster an ongoing material engagement and entanglement with the world. In this instance knowledge is situated and relational within a sentient world (Bird Rose, 2013:100) through a process of paying attention, which is eloquently described by Robin Wall Kimmerer (2003:11) as: 'slowing down and coming close, patterns emerge and expand out of the tangled tapestry threads. The threads are simultaneously distinct from the whole, and part of the whole'. The posthumanist geographer is located within in the moment encounters within fieldwork spaces that build relations with the more-than-human and human.

3.12 A democracy 'to come'

Posthumanist fieldwork offers a critical and potentially transformative agenda for ethical practices that seek to resist anthropocentric tendencies that have sought to silence the more-than-human and marginalise their presence. With the onset of the Anthropocene we are 'entering a new level of starkness and volatility' that calls our attention towards 'the uneven ways that the consequences of living in this changing world are felt and experienced by specific humans and nonhumans' (Bastian, Jones, Moore & Roe, 2017:1). Kuby et al. (2019:12) point out that we need to think with ideas

that refuse to ‘to isolate, extract, desiccate and ossify according to the logics of neoliberalism and late capitalism’. As Haraway (2016:12) reminds us ‘it matters what ideas we use to think other ideas with.’ In experimenting with geographical education as a material practice, I seek to consider what matters and who counts in order to foster democratic fieldwork spaces by exploring Derrida’s (2005) notion of democracy to come.

At first glance this ambition may seem inappropriate. The notion of democracy is a humanistic conception. Literally translated, democracy is the rule (kratos) by the people (demos) (Biesta, 2007:1) and can be interpreted in a range of different ways (Mouffe, 1992). I seek to embrace an expanded notion of democracy that acknowledges human entanglements with more-than-human subjectivities. My thinking for this section has been informed by Derrida’s (2005:26) conceptualisation of democracy as ‘an uncontrollable multiplicity or a multiplicity without unity’ which acknowledges the complexities and flaws within what he considers to be the impossible idea of democracy.

Within his writing Derrida reveals an ‘aporia’ or contradiction at the heart of democracy (Fritsch, 2002). He suggests that democracy is governed by an autoimmune logic which means that it is threatened internally by its own logic. Sovereignty and democracy are closely linked, but conflicting associates. Matthews (2013) explains that the efficacy of democracy relies on sovereignty: without sovereignty, the demos would be seized by some other power and an effective rule of the demos would never be achieved. So, within the notion of democracy an ongoing power struggle exists to establish what Derrida (2009:34) calls ‘the discourse of reason of the strongest,’ who dominates through a co-option of sovereignty. In geographical fieldwork spaces traditionally, it is humans that have had sovereignty.

In order to rule, those with sovereignty begin to limit and unify the multiplicity that enabled the formation of democracy in the first place; this can have the impact of making the community immune from difference and otherness (Matthews, 2013). Drawing on the ideas of Rousseau, Derrida (2009:13) proposes this as problematic because it suggests that the 'reason of the strongest' is in fact the best because 'it has prevailed.' It may not be the best. Derrida (2009:13) continues to point out that 'the reason of the stronger may not be right'. He urges us to focus on the word reason and question whether 'reason is good, just, given or perhaps alleged by the stronger' (Derrida, 2009: 13). Reason may not be democratic and means that some of the community's views may have been silenced and excluded. Within fieldwork-as usual-this tends to be the more-than-human elements. These omissions always return to haunt the supposed sovereignty of any political community, destroying the community's immunity from difference and otherness (Matthews, 2013: [online]).

To be truly democratic those who have the power have to offer hospitality to 'the other' who may threaten the operation of democracy (Derrida, 2000). At the same time, to prevent that threat of 'the other' from disrupting democracy, democracy must exclude the other, regarding it as a 'rogue' (Derrida, 2005). Democracy is left in a fatal deadlock because, in that state, 'democracy both excludes the other and opens itself to the excluded' and so it remains 'impossible'' (Derrida, 2005: 63).[1] Due to inner tensions and contradictions democracy is never present but is positioned 'to come' (Derrida, 2005: 82). This notion of 'to come' suggests not a 'future present' that is known and predictable. I seek to pursue a posthumanist democracy that is emergent, unforeseen, unknown and open. A democratic more-than-human/human space that creates an

[1] Democracy is a complex notion. Derrida suggests it is not predictable or possible to have a set of guidelines in advance. Rather a democracy to come is about democracy in action. It is 'unpredictable and open an unforeseeable coming of the event, a rupture or disturbance that is unpredictable and open, without *telos* or knowable destination' (Matthews, 2013: [online]).

intervention in the here and now by those present and that opens democracy to a radically different horizon (Matthews, 2013 [online]). A democracy to come nurtures an openness to the possibility of being constantly made/ remade within a more-than-human fieldwork community. It calls for a commitment and respectfulness to the idea of democracy urging 'intervention, disruption, transformation and resistance' (Matthews, 2013 [online]).

3.13 A new logic of mutual inclusion

A posthumanist 'democracy to come' occurs within a reconceptualisation of posthuman subjectivity that is materialist, vitalist, embodied and emergent within more-than-human communities. It reconceptualises the fieldwork space as a community of more-than-human and human equals where all present recognise the 'co-constitutive and implicated nature of ethics' (Kuby et al, 2019:13). This seeks to resist anthropocentric domination erasing the difference of the 'other' (Massumi, 2014:51). It is important to consider that place assemblages 'are not governed by any central head' for as Bennett (2010:24) points out, 'no one materiality or type of material has sufficient competence to determine consistently the trajectory or impact of the group'. From a posthumanist perspective, this is 'a democracy of objects rather than an anthropocentric dictatorship over inorganic materials' (Mcphie,2018: 318).

Massumi (2014) who writes about animal politics, suggests a democratic approach will respect radical differences between modes of existence. Drawing on his ideas I suggest the adoption of 'a logic of mutual inclusion' that acknowledges the 'radical differences' between the more-than-human and humans placing 'humans on a continuum with other species precisely in order to better respect the proliferation of differences: the movement of nature by which life always goes a–differing' (Massumi, 2014: 51). This logic recognises that there are 'zones of indiscernibility' between more-

than-human and human which are fixed and immutable, but this difference should be viewed positively as a place of possibility and 'the crucible of the emergence of the new.' (Massumi, 2014:50). Manson (2001: 410) suggests that when we adopt emergent approaches as the undecidability of the process 'shifts interactions onto the plane of equality'. This approach may have potential to escape the logic of enculturation embedded within education as long as educators are mindful that this is 'not about socialising learners into particular ways of being' (Osberg & Biesta, 2008:320). A space of emergence positions posthumanist democratic fieldwork sites as spaces of radical contingency and response where possibilities emerge from attentiveness to differences that matter within the assemblage of more-than-human/ human elements (Barad, 2007:382). Relational fieldwork spaces value plurality and encourage difference as 'a space where all kinds of unlikely things can knock up against each other in all kinds of ways' (Amin, Massey & Thrift, 2003: 6).

For geography education that seeks to foster relational, democratic fieldwork the ways that geographers relate to their fieldwork spaces matter, as does how they confront a 'negotiation of multiplicity' (Massey,2005:141). A posthumanist geography encourages us to rethink what politics is in the here and now. Every fieldwork moment presents geographers with questions regarding attentiveness, responsibility and accountability for the ongoing reconfiguring of places (Barad, 2007). The fieldwork spaces are not just sites of geographical knowledge production, but about participation within a multispecies collective to make a difference to 'our common worlds' (Taylor, 2017a:1454). In seeking to envision a posthumanist geography education 'replete with creativity and imagination, desire, hope and aspirations' (Braidotti, 2013:51-52), we need to consider 'how do we curate the kinds of fieldwork spaces that invite newness, innovation, improvisation and experimentation' (Kuby et al. 2019:19).

‘At a certain point, you say to the woods, to the sea, to the mountains, the world. Now I am ready. Now I will stop and be wholly attentive. You empty yourself and wait, listening’.

(Dillard, 2017:92)

I am now ready to embark on explorations of geographical fieldwork spaces, to be wholly attentive and alert to the possibilities of posthumanist spaces … I am ready to ‘take the plunge to propel’ me into ‘the not known’ (Taylor, 2016a:20) ...

Chapter 4. ~~Research methodology and methods~~

Taking the plunge and getting lost…

'...to be lost is to be fully present, and to be fully present is to be capable of being in uncertainty and mystery. And one does not get lost but loses oneself, with the implication that it is a conscious choice, a chosen surrender...' (Solnit, 2006: 6)

This chapter shares methodological explorations of this living enquiry into relational geographies during a residential fieldwork experience. As an experiment with the notion of co-creating and co-curating an inquisitive, democratic, inclusive space emerged through difference and boundless possibilities. Deleuze & Guattari (1994:111) proposed that 'to think is to experiment, but experimentation is always that which is in the process of coming about - the new, remarkable, and interesting'.

4.1 Becoming lost in the 'chaotic place of unknowing' (Somerville,2008)

In seeking to do things differently I have moved away from what Taylor (2017a: 312) refers to as a 'methods as usual' approach in traditional qualitative studies. This study did not seek to 'tame the data' and moved away from wanting to 'mold [sic], discipline, test, tweak, digitalise, approve, surveil and treat anything and everything alike' (Koro-Ljungberg, Carlson, Tesar, & Anderson, 2015:615). It engaged with the messy, disruptive, lively, serendipitous co-production and co-relation of 'new forms of sociality' (Taylor,2016a:20) amongst more-than-human and human within fieldwork spaces.

This emerging methodology was 'risky' (Taylor,2016a:20) and messy (Law, 2004) and I have frequently found myself 'getting lost' (Lather 2007) amongst the complexities and uncertainties of post-qualitative readings. The idea of 'getting lost' as a way of knowing in post-qualitative research was inspired by the thinking of feminist

ethnographer Patti Lather (2007). Solnit (2006) explored two contrasting meanings of the notion of lost which I feel both apply within this research situation. She suggested that 'losing things is about the familiar falling away, getting lost is about the unfamiliar appearing' (Solnit 2006:22). So, engaging with alternative methodologies and leaving behind the known of traditional methodologies unsettled my being making me aware that the world has become larger than my knowledge of it (Solnit,2006) even though this had always been the case. As the researcher, I was aware this loss of control, loss of expertise can lead to 'problematizing the researcher as 'the one who knows'' (Lather 2007: 11).

I have frequently returned to Somerville's (2008:210) question – 'How can I open myself to what I do not yet know?' Fotheringham (2013) suggested that when a person exists in this place of 'not knowing, of surrender, of reduced power…this is when naturally, the opportunity to see or understand something different surfaces.' So, in shedding notions of certainty, questioning expertise and authority this study positions the researcher and the research(ed) differently. I have waited patiently in the 'chaotic place of unknowing' for a methodology to come (Somerville,2008) in order to embrace the constant 'acquisition of moments of arrival, moments of realisation, moments of discovery' that occur when one is getting lost (Solnit, 2006:x).

4.2 Co-knowing-with the New Forest

Throughout the challenges of post-qualitative research the New Forest was a constant companion. The New Forest is a significant place for me personally. My relationship with the Forest is not new, it is lifelong as the New Forest has been constantly present. A place of childhood when its shady woodland and gentle streams provided a sanctuary from the relentless heat of beach and sand; a place of escape when University studies became all consuming; a place of weekend relaxation –

camping, walking and exploring; a place for learning, accompanying students and children on fieldwork visits. It feels appropriate that for my doctoral studies rooted in posthumanist perspectives I have returned to a place with which I already have a long established and close association in order to experiment with notions of lively relational geographies in forest places.

For readers of this thesis who are unfamiliar with the New Forest it feels appropriate to introduce the place. The New Forest is nestled on the edge of Southern England. It is an ancient place – where people live side by side with the more-than-human and have done so for centuries. It is the 'oldest domesticated forest in the world' (Kraus, 1982:1). Much of the Forest was granted National Park status in April 2005 and within its boundaries has Areas of Outstanding Natural Beauty and several sites of Special Scientific Interest (SSSI). A place of beech, holly, oak, conifers and redwoods, heather, moorland, bracken, heath, gorse, ponds, rhododendrons, azaleas, moss, pasture, streams, grassland, ponies, deer, pigs, donkeys and a multitude of more-than-human others. They share a place that is full of beauty, magic and wonder, yet is fragile and suffering from species decline.

This thesis work is based around the Environmental Study Centre at Minstead. Minstead Environmental Study Centre was chosen for its accessibility for human participants. It is a residential setting which has been the source of inspiration for my practice and thinking with children and students in teacher education over the years. Rooted in a philosophy designed to connect children and adults with the natural world the Minstead Study Centre and the surrounding areas of the village - Manor Wood, Acres Down, Wick Wood- offer unique spaces to think differently about educative place experiences. As a geographer my first instinct is to introduce the location through maps to provide a spatial context.

Figure 7: A map of the New Forest

Courtesy of Ordnance Survey Digimaps for schools: Edinburgh: Edina

The maps in figures 7 and 8 share places and spaces of the New Forest. Yet this study moves from (secure) representation to (unfolding) practice (Kitchin & Dodge, 2007:335). It shares different ways of relational knowing and different mappings. Mappings that share emergent movements of thinking 'in diverse directions instead of a single path multiplying its own lines and establishing the plurality of unpredictable connections' (Semetsky, 2008: xv). This thesis is an attempt to map the stories of happenings that unravel and emerge through relational fieldwork experiences when thinking space/place differently. I seek to share the 'thinking–feeling, the embodied sensation of making sense, the lived experience' as participants co-construct 'knowledge in the making' (Ellsworth, 2005:1) within more-than-human New Forest communities. This mapping is an inherently subjective and creative act (Kitchin & Dodge, 2007).

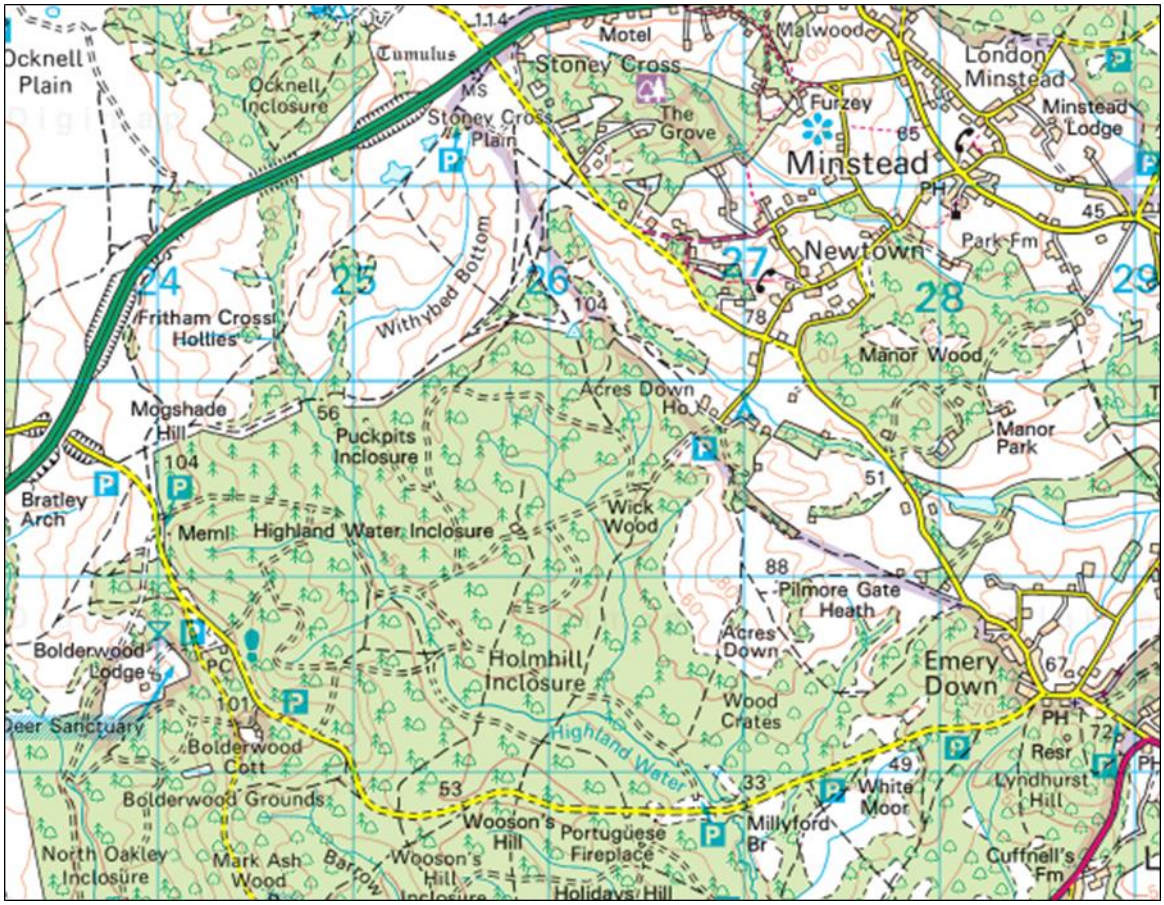


Figure 8: A map of Minstead and the surrounding area

Courtesy of Ordnance Survey Digimaps for schools: Edinburgh: Edina

The area around Minstead in the New Forest is at the heart of this thesis and co-author of our experiences over the weekend. Inspired by Country et al. (2016: 456) these places 'enabled our learning, our meeting, the stories that guide(d) us, the connections we discuss(ed)' to help us mutually co-construct our thinking from our fieldwork experiences. It is imperative that the New Forest is acknowledged as having some 'author-ity' within the researcher-data assemblage as it is impossible to separate the contribution of more-than-human and geography educators who participated (Country et al. 2016:456). It is hoped to challenge notions of academic/non-academic ways of knowing within geographical education by acknowledging the agency of New Forest places in our experimentations.

4.3 The invitations of place

Paying attention to moments of invitation was the focus of this geographical fieldwork enquiry. Invitation in this instance was defined as a call or request to engage in action; it could be framed as something that encouraged, provoked or lured human participants into being present in the physical world. It was hoped that provocations might 'activate extraordinary thinking' (Blaise, 2016: 618) and disrupt notions of fieldwork-as-usual. Invitations opened possibilities for participation that attended to the particulars and specifics of each fieldwork site through 'multiple entanglements of actions, meanings and materialities' (Blaise, 2016:618). This invitational approach did not seek to separate, elevate or remove humans from the fieldwork space rather it engaged participants in a 'relational emergent reality' (Davies, 2014:23) with the more-than-human and material elements within a site. This marked my conscious effort to undertake 'a recuperation of materiality' (Whatmore,2006:602) to see if sensory, bodily and affective immersion in place provoked different ways of thinking, being and knowing in geographical fieldwork spaces.

4.4. A living enquiry

The study situated fieldwork places as lively and generative and opened up opportunities for geography educators 'to learn *with* rather than learn about the non-human others with whom we cohabit' (Taylor, Blaise & Giugni. 2013: 59). This enquiry nurtured fieldwork as spaces of becoming as more-than-human/human relationships formed, shifted and changed. In focusing research on the relations and connections that emerged, as researcher, I needed to be careful about getting caught in human-centredness. I was interested in co-constructing mutually constituted place knowledge. I tried to focus attention on the ways human participants were brought into relation with the New Forest through intra-action. Jones & Hoskins (2016:83) suggested that an

invitation to explore and engage in ‘intra-action is as much about experience as method’.

My enquiry is practice-based research situated ‘where theory-as-practice-as process-as-complication intentionally unsettles perception and knowing through living inquiry’ (Irwin & Springgay, 2008: xxi). The research was undertaken in a spirit of companionship – a confluence between theory, experience, research and practice. Barad reminded me of the interconnectedness of things when she wrote ‘theories are not mere metaphysical pronouncements on the world from a presumed position of exteriority. Theories are living and breathing reconfigurings of the world’ (Barad, 2012:7). As a primary teacher who became a geography educator within a Higher Education institution, I found it hard to disentangle my pedagogical thinking, disciplinary knowledge and everyday geographies from my research practices. I have refused to create divisions between my practices as geographer, teacher and researcher. Inspired by a/r/tography (Irwin and de Cosson, 2004), I recognised all three conceptualisations as simultaneous and non-hierarchical. Adapting ideas from Holbrook and Pourchier (2014:754), I believed the researcher does not subsume the geographer, ’nor the teacher stand outside the researcher’. The intention of my study was that the theory was lived ‘both in the bodies that do the theorizing and the bodies that are theorized about’ (Clark/Keefe, 2014:794). As Barad (2012:2) acknowledged ‘doing theory requires being open to the world’s aliveness allowing oneself to be lured by curiosity, surprise and wonder.’

In travelling with a range of theoretical ideas this was a genuine attempt to experiment with and (re)imagine posthumanist research practices within the field of geography education Taylor (2016a:21) noted this kind of research ‘sits uncomfortably on the boundaries between educational research, pedagogic practice and reflective

practice where the collaborative disrupts the individual and invites consideration of a confederate activity of any manner of bodies in the production of curriculum making'. By resisting habitual research practices and playing with new ways of exploring fieldwork spaces I hoped to enact research in a spirit of increased openness, creativity and risk taking in order 'to produce different knowledge and produce knowledge differently' (Lather,2007:13).

4.5. Wandering, wondering and generating

My experimenting with posthumanist ideas occurred across one intensive fieldwork weekend in July 2017. This enquiry was small scale and time limited to help keep the data generated as manageable as possible for in the context of post-qualitative research data could be limitless. As my study sought to shift geographical fieldwork spaces from places of 'human centrings' to places of 'posthumanist profusion' (Taylor: 2016a:6) there was a possibility of engaging with an abundance of data as we encountered the New Forest fieldwork site: things, materials, animals, weather, atmospheres, memories, responses etc. At times the plurality of the New Forest fieldwork spaces seemed overwhelming, yet I resisted the urge to simplify, to reduce the focus, to limit my interests as I wanted to reflect the sentience, diversity and multiplicity that existed within a more-than-human world. My thesis finds its rigour from embracing multiple truths that 'celebrates plurality, proliferative modes of thinking, acting and being rather than unitary, static, binary and totalising modes' (Martin and Kamberelis, 2013:670). In posthumanist paradigms the quality of the research is not judged by externally placed criteria for validity (Koro-Ljungberg, 2016b, [online]). Rather it is found in the researcher's ability to be as honest and transparent about the research process as possible for there is something about 'contextuality, unique time and place that can help scholars to recognise the value of whatever you are evaluating'

(Ibid.). Within post-qualitative studies the worth of the research is often judged in its ability to create movement to change and transform a reader's thinking. Massumi in Deleuze and Guattari (1988/2013: xiv) writes:

> The question is not: is it true? But: does it work? What new thoughts does it make possible to think? What new emotions does it make possible to feel? What new sensations and perceptions does it open in the body?

A 'wildthink' approach was adopted (see figures 9 and 10 below). Wildthink is a relatively new fieldwork process concept which emerged from geographers travelling together on journeys in the Brecons and Moelwyns in Wales (Owens, Rawlinson & Witt, 2012). Wildthink encourages participants to slow down, to linger with places, learning to move slowly, attentively, and playfully (Owens,2017). This slowing down to be in places sensitises one to the possibilities that its varied beings and processes have voices, responsiveness, agencies, and cultures (Blenkinsopp et al. 2017:352). This fieldwork is rooted in notions of 'Place-Thought'; a space where place and thought are 'never separated because they never could or can be separated' (Watts, 2013:21). This is a way of knowing with a living, thinking world. Fieldwork using the wildthink process does not set out with a pre-determined outcome; it is not a linear process. Instead wildthink encourages educators to put 'the meanders back into learning' (Owens, 2017:10). In the context of this study fieldwork was an act of geographical wandering which took the form of embodied and sensory experiential journeys. This is fieldwork understood as creative encounters where 'the relationship between movement, cognition and knowledge is central rather than a means of 'collecting information about the site' (Pyyry, 2016: 111). This is 'thinking as experience' (Dewsbury,2010:151).

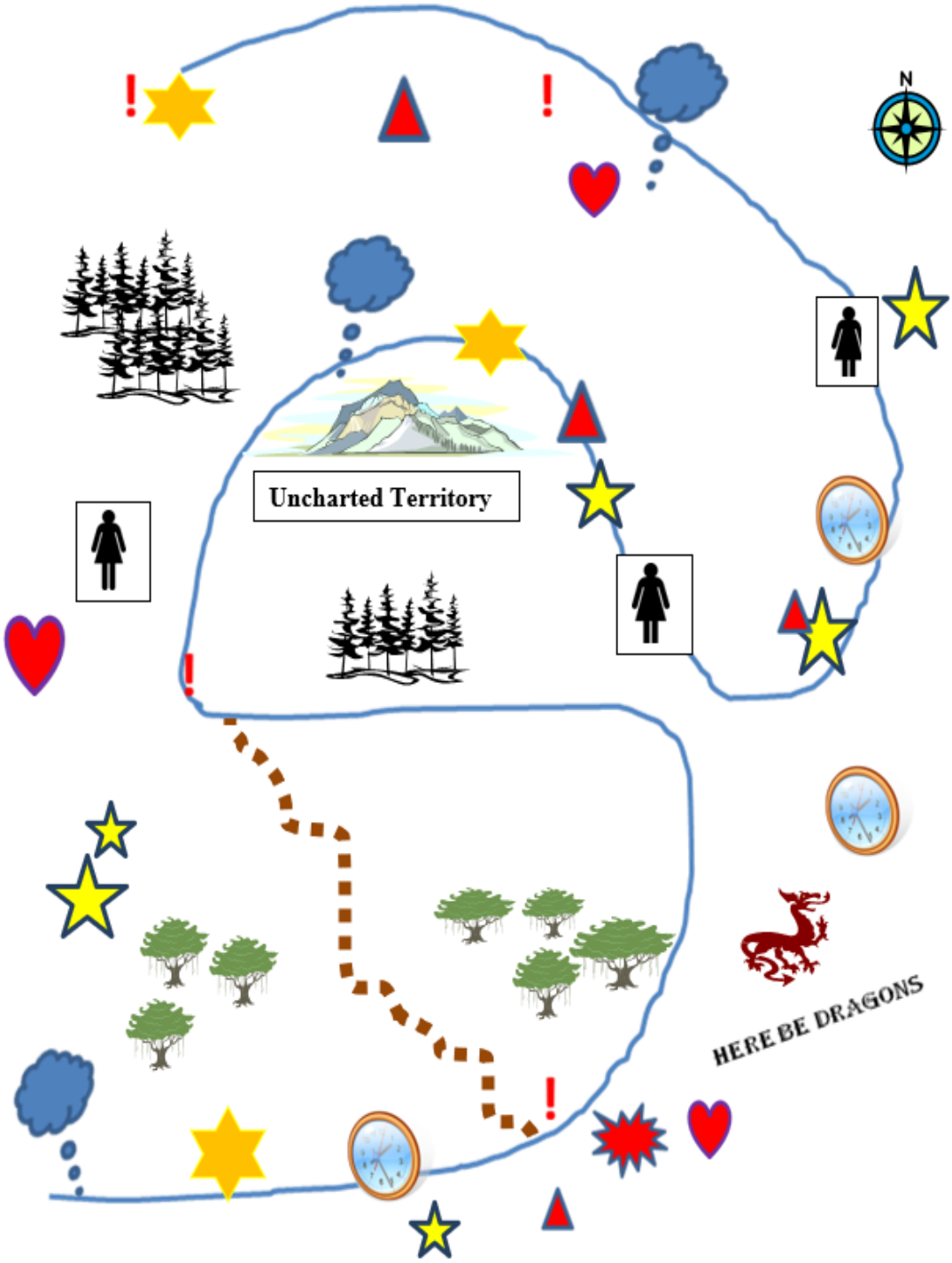


Figure 9: Mapping participatory approaches through Wildthink processes

Adapted from Owens (2017:219)

Map Key		
Icon	Meaning	Implication
	Assessment checkpoint	*Time for dialogue and reflection – community travelling together re consensus and negotiation of participation. Dialogue regarding the process and immediate feedback into research process and longer more considered, conversations available. This is a continuous framework without clearly delineated start and stop points.*
	Barrier or jam	*Conversations and dialogue help find new paths and solutions. Often veering into uncharted territory.*
	Conversations and dialogues	*A dialogic rich environment produces nuanced understanding of relational layered learning outcomes and fosters creative responses; it helps solve problems, recognises differences and consolidates understanding.*
	Detours, diversions and shortcuts	*Shortcuts or new routes are found collaboratively or can be suggested following dialogic interventions. Sometimes a new route can involve risk, but others will support new thinking. Shared risk prompts more to engage. Creativity through solutions.*
	Mediated tasks	*Mediated tasks and activities tasks to draw attention to places. These moments nurturing place responsiveness are initiated by human members of the fieldwork community*
	Meandering learning path	*Putting the meanders back into learning. There is risk, uncertainty and new terrain to be encountered along the way as well as new paths of learning. The unevenness and varied terrain demands different kinds of skills. The risk heightens awareness and perception and invites problem solving and new thinking.*
	Risk	
	Time to stop, slow down	*Lots of informal time to mingle, curate and fold in ideas, fostering creativity and imagination. Time to stop, think and be curious. Question and debate sessions invite open ended contributions and encourage different views. All views and opinions are valued.*
	Creativity and imagination	
	Time for bright ideas	
	Awe and wonder	*Positive learning experiences in natural settings can trigger pro – environmental behaviours. New and novel settings and outdoor experiences all contribute.*
	Emotional encounters	*Emotional and cognitive experiences work together to deepen learning through exploratory enquiry*
	Wild terrain	*'The wild of the unknown' can be a powerful catalyst for change and can trigger transformational learning, challenging existing values and unsettling traditional ones. Unusual views offer a different perspective on a familiar problem.*
!	Critical thinking	

Figure 10: Key to Wildthink process map
Adapted from Owens (2017: 219)

During wildthink the geographical learning outcomes were unplanned as this non-instrumental, serendipitous practice enabled the geography educators to travel without knowing the destination. This lack of any tangible outcome aimed to nurture spaces for enchantment to appear as human participants stayed open to encounters with more-than-human fieldwork spaces. In order to achieve this the guidance given to the participants was minimal and open-ended, often mediated in the moment, in order to leave spaces for improvisation which Pyyry (2015:105) suggests was needed for 'engagement and enchantment to happen'. Human participants were placed amid uncertainty 'lingering on the edge of the not-yet' (St Pierre,2019:3) requiring us to be hopeful. That is, the participants were invited to put their trust in the fact that something may come out of their wanderings, although we were 'not yet completely sure what' (Rajchman, 2000:7).

Participants wandered together and immersed themselves noticing, engaging and responding to more-than-human encounters e.g. rocks, trees, found objects and soils situated in a range of fieldwork locations at their own pace. This collaboration offered a chance to engage in 'collective thinking in the presence of others' (Stengers, 2005:1005). It would enable me to get at the qualitative multiplicities (Braidotti, 2002) and intensities within the fieldwork space. I acknowledged that 'thinking in the presence of others… was not abstract cognition, but a doing and feeling' (Instone & Taylor, 2015:136). The enquiry was shifted from focusing on solely human action to 'an approach predicated upon humans and their bodies, examining instead how relational networks or assemblages of animate and inanimate, affect and are affected' (Fox and Alldred, 2014: 1).

We wondered, wandered and wildthought with the following ideas:

- What constitutes an invitation? How is an invitation constituted?

- Where are invitations found?
- How do we, as fieldwork participants, respond to these?

The route to be taken was negotiated in order to retain the flexibility needed to be able to pursue the invitations offered along the route. It allowed for spontaneity and encouraged participants to follow their interests and consider what grabbed their attention and intuition. Each participant had a copy of these ideas to prompt their thinking as they travelled (figure 11):

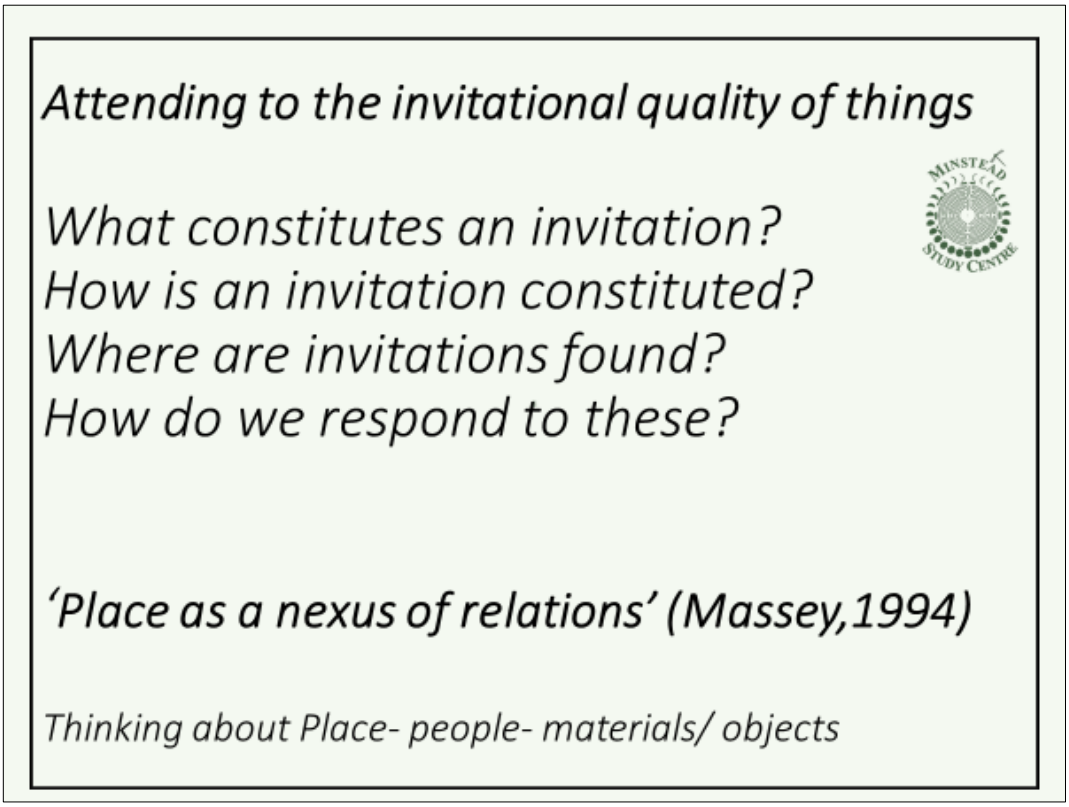


Figure 11: Attending to the invitational quality of fieldwork spaces

The research was not seeking to answer these questions, but to undertake an emergent process of 'wondering and generating' (Somerville, 2008:210).

4.6. We are in this together

Prior to the event invitations were sent out to possible participants. A convenience sample was formed from an open invitation to all undergraduate Batchelor of Education (BEd)/Master of Education (MEd) students who had opted to undertake a geography

specialism at the University where I am employed. This was an opportunity for a range of student cohorts across the ITE programmes to exchange ideas at different stages in their careers.

The teacher educators were invited as a sample of geography teacher educators and primary geography consultants from within geography subject association networks that seek to further geographical knowledge and understanding through education. This was a community of enquirers that included a range of geography educators from Primary, Secondary and Higher Education. They were selected according to availability on the date and willingness to participate following an open invitation. Teachers were invited from a list of members of the professional networking site Geography Champions[2] on a first come, first served basis due to limited accommodation. We were able to offer all those interested the opportunity to be involved. A total of fourteen participants took part in the fieldwork. To maintain anonymity human participants were given pseudonyms; these appear in figure 12 alongside their status, not to emphasise hierarchy, but to inform the reader.

P1	Daisy	University ITE tutor
P2	Tim	Student
P3	Beth	Student
P4	Samuel	University ITE tutor
P5	David	Student
P6	Natalie	Student
P7	Hannah	University ITE tutor
P8	Harriet	Primary Teacher
P9	Mark	Secondary Teacher
P10	Trudie	University ITE tutor
P11	Nick	Student
P12	Phoebe	Teacher Educator
P13	Clare	Student
P14	Wendy	Student

Figure12: Human participants and their pseudonyms

[2]Primary Geography Champions a network for teachers run by the subject Association for Geography – the Geographical Association (G.A.)Association http://geographychampions.ning.com/

Participants included seven student teachers at varying stages in their BEd/ MEd in Primary Education courses at University; four were year 4 MEd. students who had just completed their degree, one student was a third year MEd student and two students were in the second year of a three year BEd course. All the students were known to the researcher, but not all the students knew each other. Four participants were Teacher Educators from three different institutions, who have an interest in geographical education. Three participants were teachers: two with primary and one with secondary experience; one of these was also an independent consultant. One of the teacher participants withdrew on the Friday evening due to ill-health. An invitation (figure 13) was sent out to interested parties with the promise of more details to follow if they were interested.

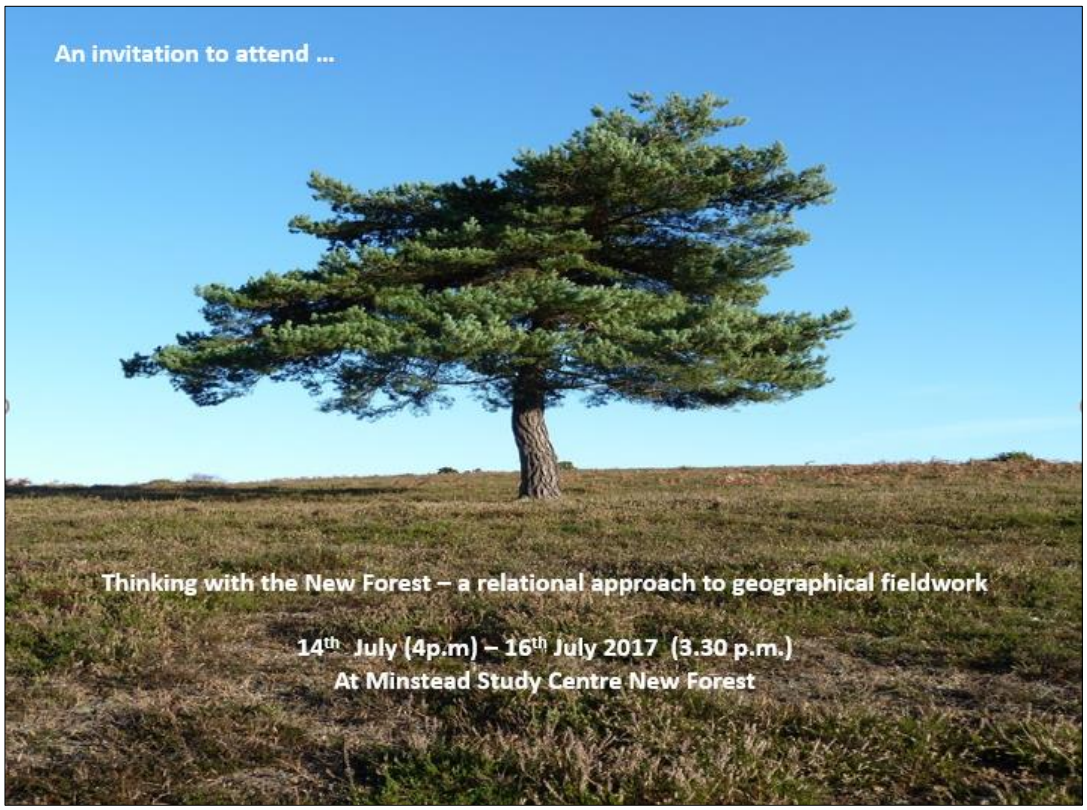


Figure 13: An invitation to attend the relational fieldwork event

As we were only together for one weekend it was important to establish the community quickly and so 'getting to know you' activities were planned prior to the visit for human participants. An electronic discussion space enabled participants who were based in widely dispersed geographical locations to introduce themselves and share some of their thinking on previous fieldwork experiences. Although human focused, I hoped this attention to relationships would be modelled through the rest of the study when engaging with the more-than-human.

The more-than-human elements within the study were self-selecting as they intra-acted with human participants in assemblages. I wish I had space to list all the more-than-human participants who showed up during the research event, but the fieldwork spaces were heterogenous and in naming some I fear that I would silence others. I have strived to acknowledge the ongoing encounters of more-than-human/human participants throughout chapter 6, acknowledging their co-existing multiplicities and presence within the study. Underpinning this project was a practical attempt to create spaces of mutual inclusion between both the more-than-human and human which

embraced the Braidottian idea of community and of connection that ‘‘we’ are in this together’ (Braidotti 2011:19). In seeking to explore fieldwork spaces as places of invitation, provocation and possibility certain conditions needed to be in place.

4.7 Research as entangled engagement

The fieldwork community were positioned as co-researchers for just the duration of the fieldwork weekend, so this was a partial participatory research project. Through the study all participants, both more-than-human and human, were part of the ongoing experimentation and continuous co-generation of experience and knowledge for the weekend. It was a space of ‘co-existing heterogeneity’ (Massey,2005:9). The fieldwork space was a meeting place for more-than-human/human materials, atmospheres emotions, weather, ideas etc – a meeting place of difference that positioned my study as an activity of ‘embedded engagement *in* the world of which it is part’ (Massey, 2005: 28). The fieldwork community became ‘a way of mattering’, that is a ‘place where self and other matter make a difference to each other and with each other’ (Davies, 2014:12). In this study the communal space was constituted through intra-actions within place assemblages. The geographical fieldwork space became a place to question what is being made to matter and how that mattering affects what it is possible to do and think (Davies, 2014:11).

Following the study there were no plans to engage human participants further. This decision was taken partly due to the financial and logistical challenges of bringing together a diverse group of busy educators, who reside in different parts of the UK. As author of the thesis I was keen to explore the emergent findings that were co-generated and co-authored by both the more-than-human/human research encounters and consider alongside my own personal readings of posthumanism/new materialism. Recognising the more-than-human/human contribution within the fieldwork weekend

has presented some difficulties within my writing. I have considered carefully when to write I/my or we/our through the thesis as Morton (2018:6) acknowledges that 'pronouns are complicated things in an ecological age'. I will purposefully use 'we' to acknowledge the more-than-human/human community involvement during the fieldwork weekend whilst using 'I' to be explicit and acknowledge my own authorship.

4.8 Befriending the New Forest

Within a traditional qualitative research project, the human author is deemed pivotal to its making. In enacting a posthumanist study, I sought to decentre the human by entering into a relationship with the 'data' generated within the fieldwork event. Inspired by Rautio & Vladimirova (2017:23) I personified and befriended my data as ontologically significant non-human others. As Rautio & Vladimirova (2017:23) suggest 'if data is considered a personified companion, more emotions and complexities have access to research practices.' This thesis sought to personify rather than humanise New Forest places to purposefully break down the illusion of a fieldwork space as inert. In this thesis befriending data was conceptualised as 'a practice of 'becoming other' (Rautio & Vladimirova, 2017:27) enabling practices to be enacted where participants, including the researcher, were positioned as 'becoming less human and more a being among others' (Pedersen, 2010:243) which is significant for a relational way of doing posthumanist geographical fieldwork.

Thus, the data and researcher entered together into a researcher-data assemblage (Coleman & Ringrose, 2013; Fox & Alldred, 2015; Thomas,2016). This placed the researcher as part of a 'living, throbbing confederation of entangled phenomenon' of which they are one part (Allen & Rasmussen, 2016:4). As the researcher I was not an autonomous agent, but inextricably linked through intra-action and companionship to the 'multiple intervening voices, concepts and theories' that

emerged from my fieldwork enquiry (Pedersen and Pini, 2017:1052). As Maclure (2013:659-660) explained this positions discourse and matter as mutually implicated in the 'unfolding emergence of the world'. Within this framework the researcher, the research processes and the events were caught up in the enquiry and placed in relation within a research–assemblage in a variety of ways. These could be 'corporeal, technological, mechanical, virtual, discursive and imaginary' (Ivinson and Renold, 2014:4). This approach enabled the researcher and data to become entwined valuing immediacy rather than the distance and objectivity of more traditional methods.

In 'coming into being' with the data Jackson & Mazzei (2012) considered that the closeness of the data-researcher assemblage can provoke an intervention in the research process to prompt previously unthought questions. Thomas (2016:41) suggested that it was worth considering 'what is data, what can be done with, and to data and finally what data can do to me as a researcher?' Data within my study was viewed as dynamic, productive and co-constitutive within this relationship. This approach flattened the hierarchies that can exist in some traditional approaches by unsettling the authoritative human influence of the researcher. This is known as a 'flat ontology' (De Landa, 2002; Lenz Taguchi, 2010) enabling 'humans and more-than-human to connect and collide on the same ontological level through complex webs of material-discursive intra-actions of unknowable and unnameable proportions' (Allen & Rasmussen,2016:5).

Within this study I did not see 'data as providing knowledge to inform' rather I sought to engage with the 'unknowability of data' (Thomas, 2016:41). In framing data as 'constant becomings' I engaged in emergent processes of continual thinking, unthinking and continual doing/undoing (Thomas, 2016:41) to explore new ideas about doing geographical fieldwork differently. The research-data assemblage was complex

as data played with and constructed a multiplicity of identities for the researcher as I engaged in relationships with multiple others (Thomas 2016:43). As Pedersen & Pini (2017:1053) pointed out this brought 'acute and inherent fragility and vulnerability' to the researcher role. I felt deeply implicated within this study and hope I have lived up to St Pierre's (2017b:2) challenge 'to *live* the theories' of post-qualitative study'. At times this has been an emotional process in which I have found myself wrestling with posthumanist/new materialist ideas as I have worked to enact them in geographical fieldwork spaces. As problems have emerged, I have taken heart from Maclure's writings (2010:14) that challenging and difficult research moments may have much more to teach us than the 'static connections that we often assume between self and the researcher and researched'.

4.9 A matter of ethics

This enquiry has been subject to the University ethics application process (appendix 3) and consent was gained from the Ethics committees to proceed (appendix 4). I made arrangements according to the BERA ethical guidelines (2011, [online]) and the University of Exeter's ethics policy (2017). Ethical issues were considered fully cognisant of the foregrounding of human and the near silencing of the more-than-human. It was a necessary procedure in order to progress my study within the Academy. A project information sheet and consent for the research project (appendix 3) has been shared and an outline programme for the weekend (appendix 5) was created to inform the human participants of procedures. The protocols for data storage were made clear. Data was anonymised and safely protected in locked filing cabinets (if paper based) and securely stored in password protected files stored on the University U–Drive computer (digital sources).

In addition, the usual geographical fieldwork protocols were put in place. A pre-visit was undertaken, risk assessment and management protocols were put in place (see appendix 6). I recognise that the importance of building trust and creating a 'safe' space for the human participants was integral to the conditions required for relational geographies to thrive. Yet I was aware that historically ethics has been 'seen as a mastery of a set of behaviours toward someone or something…a means to domesticate 'the other'' (Kuby et al. 2019:13).

In seeking posthumanist perspectives for my research I recognised the need to supplement the University ethics procedure to include, and not ignore, the more-than-human within the fieldwork space. This approach would acknowledge the researcher's implicit relationship to the happenings of the world and recognise 'the co-constitutive and mutually implicated nature of ethics' (Kuby et al. 2019:13). I sought a shift from institutionalised approved ethics to engage in relational ethical practices which required movement from a focus on the human as 'an autonomous individual capable of making rational ethical choices' (Greenough & Roe, 2010:43). As joint researchers the group were still responsible for their behaviour in the fieldwork space, we 'just no longer have illusions that our part is any grander than it is' (Rautio, 2013:402).

In the context of this study, an ethical focus on individuals and their rights could detach the human from the fieldwork environment, not recognising their connectivity to more-than-human others; it, therefore, required a more-than the standard approach to ethics. Davies (2014:10) suggested that 'ethics cannot be a matter of separate individuals following a set of rules.' For agency might be 'distributed across multiple, overlapping bodies, disseminated in degrees rather than the capacity of a unitary subject of consciousness' (Bennett, 2007:134). A collective rather than individual view of ethics was supported by Barad (2007) who suggested ethics emerged within intra-

active encounters with matter in which knowing, being and doing are intimately entangled. Researchers are made responsible and accountable for the 'lively relationalities' of more-than-human/human becomings (Dolphijn and van der Tuin 2012:96). A shift from humanist ethical concerns, where individuals were made responsible for their choices, was required; individuals needed to learn to participate in a collective response-ability i.e. a 'praxis of care and response' (Haraway, 2016:105). Haraway (2016) suggested that ethics had a performative dimension. A posthuman ethics offers 'a way to think about the present and make considerations about a better, more just right now' rather than being futures-orientated (Kuby et al. 2017:13). I adopted a more situated and practical approach to enacting ethical practices, which made me appreciate that my study was 'a complex knot of wheres' (Hinchcliffe, 2010:35); a complex geography of intra-actions.

In addition to the ethics identified a priori, I sought to establish a community that cultivated sensitivity through proximity, openness and receptivity. Opportunities for ongoing conversations, actions and (re)negotiation were provided to consider what emerged in the moment within the fieldwork space. I believed that 'the capacity and willingness to be open to the other, in all … [its] difference' was crucial … 'to the constitution of that community as an ethical place' (Davies, 2010:11). Throughout the study, ethical responses to ongoing encounters that were unpredictable and not yet known, were needed in the moment which was challenging and required constant vigilance and care. Haraway (2015:163) also suggested a more-than-human ethics demanded 'joy, play, and response-ability to engage with unexpected others.' This shifted ethics to 'a concern for welfare rather than rights' (Greenough and Roe, 2010:45). A posthumanist ethical approach acknowledged that any ethical issue cannot be confined to one person, place, or procedure (like an informed consent), but

needed to be situated in relation to a whole series of locations and agents (Whatmore,1997).

4.10 Diffraction

In thinking about my data entanglements, I turned to Barad's (2007) concept of diffraction as a methodological practice. Barad (2007:88) suggested a shift towards diffraction 'is a way of understanding the world from within and as part of it'. This is appropriate for a study that emphasised sensory, embodied and affective engagement with fieldwork spaces. Haraway (1997:16) suggested a diffractive methodology is a 'critical practice for making a difference in the world'. Diffraction as a methodology and analysis has been increasingly adopted within posthumanist educational research studies (Lenz Taguchi,2010; Pacini-Ketchabaw et al. 2017; Ivinson & Renold, 2016; Davies, 2014). It is a tool that acknowledged the 'roles of both the material and the discursive in knowledge production' (Mazzei, 2014:742). In 'Meeting the Universe Halfway' Barad (2007) explored diffraction as a significant concept within physical processes. The process of diffraction describes the way that waves combine as they overlap or apparently bend and spread when they encounter an obstruction (Barad, 2007). Diffraction can happen with any type of wave e.g. sound, light or water. As two (or more) waves meet they interfere with one another. The movements generate differences from within (Mazzei, 2014). Willis points out 'this interference is never simply destructive; it is also constructive'. So, like the waves, ideas, concepts and practice will have 'an affect on each other – they interfere with each other' (Davies, 2014:3). My study applied diffraction through becoming intertwined with multiple texts and coming into relation with a multitude of things which focused on 'making and marking differences from within as a part of an entangled state' (Ivinson & Renold

2016:171). This is research ‘where knowledge is always in process, always becoming and where transformation emerges in intra-actions’ (Ivinson & Renold,2016:171).

Within my study diffraction replaced the more commonly used education practice of reflection (Davies, 2014). It offered a very different way of looking at – or rather being in and with – the world. Haraway (1997) believed that self-reflection was a reductionist way of thinking about things and words as it sought to uncover the essence or truth of the data. Reflective practices, including reflexivity, tends to evoke the original that is reflected as in a mirror; with our brains simply acting as the mirror that can pick up the original by gazing at it. Research becomes caught up in ‘the representation of individual entities. Truth represents a single, neatly bounded reality’ (Barad,2007:55). So ‘reflection is insufficient; intervention is the key’ (Barad, 2007:50). Instead I was seeking to become entangled with the on-going intra-active processes where matter was made to matter in one way or another. Barad (2007: 88) insisted that diffraction was not a mere substitution of one optic analogy for another, but a different attention to ‘specific material entanglements.’ Diffractive methodology is itself entangled and it ‘brings the reality of entanglements to light’ (Barad, 2007:73).

Diffraction involved reading insights through intra-action of text, activity, ideas, place assemblages etc. that ‘spread thought in unpredictable patterns’ and created ‘productive emergences producing different knowledge’ (Mazzei, 2014:742). Data then was ‘lived in new ways’ (Lather, 2013: 639) with a focus on the presence of the more-than-human. Lather (2013) suggests companionship becomes the dominant state and so within my study I tried to open up to being entangled with the more-than-human world and the materials used to collect the data. As a consequence of this, a diffractive strategy took into account that knowing is never done in isolation. It is always affected

by different forces coming together, or in Barad's (2007:185) words: 'knowing is a matter of part of the world making itself intelligible to another part of the world'.

4.11 Mingling

In seeking to prise an opening within my fieldwork space to follow the lead of place invitations I was careful to resist linearity as I was aware that a detailed chronological account of the event would be too simplistic and reduce the complexity and nuances of the fieldwork spaces. I was not intending to pursue the methodology of an intervention study or seek to find out the 'truth' about a specific place or particular kind of fieldwork. Instead I sought alternative ways to articulate my research experiences. I was reminded that post humanist/new materialist research practices were about 'attending to presence, about noticing, and responding in kind' (Introna, Kavanagh, Kelly, Orlikowski & Scott, 2016:23) so I sought to immerse myself in 'relational situations' with my data and my reading (Irwin & Springgay, 2008: xxi). I hoped to acknowledge that the more-than-human and human were both present in the researcher–data assemblage and all were leading their own lives within the emergent fieldwork spaces. I wanted methods that did not rely solely on language to explore fieldwork sites. For as Holbrook & Pourchier (2014:758) noted 'language is never able to fully capture how we think the world'. To unsettle more traditional approaches to qualitative research, I have decided to explore the possibilities for experimentation presented by mingling, curating and (un)folding processes. In choosing these terms I hoped to develop my thinking in new ways. However, I have come to realise that these processes are not easily divided into clear stages rather, they are interconnected and evident within all aspects of the study.

Inspired by Rautio's conception of mingling (2014), the word suggests mixing, blending, merging and combining– all actions appropriate for a study of more-than-

human/human relationships within fieldwork spaces. The word originated from middle Dutch in the fifteenth century and means ‘to join with others’ and ‘be sociable’. Mingling in the context of my study occurred through New Forest more-than-human/human intra-actions. This created a fieldwork space for being and knowing which was ‘de-individualised and open-ended’ (Rautio, 2014: 472). My study also explored the mingling of roles for research participants. Inspired by the idea of a/r/t/ography in Kothe’s (2016) research within museums, all human participants possessed multiple roles as geographers, researchers, teachers, data. The more-than-human participants acted as provocateurs, teachers, mediators and data. The fieldwork event provided practice-based relational encounters of mingling with place or as La Jevic & Springgay (2008:83) described ‘being with’ place.

This following section of the chapter shares the heuristic approaches we adopted to ‘mingle’ within our fieldwork space. A multiplicity of approaches was used in the hope that these were flexible and adaptable enough to explore multiple sensory, embodied and affective elements. These needed to cope with the flux, dynamism, ephemeral, emotional elements within the fieldwork site ‘where raw events happen and elements are wedged and pasted together ad-inifinitum’ (Koro-Ljungberg,2015:613). Throughout the fieldwork we were trying to make explicit the stories, connections, and happenings when more-than-human meet in relational fieldwork spaces.

4.11.1 Moving with others

Believing that ‘place makes a difference to methodology’ (Elwood & Martin, 2000) we experimented with mobile methods in the form of walking with others to capture intra-activity between human and more than human in-situ as we explored, navigated, negotiated and journeyed across landscapes. Pink (2009:76) recognised ‘walking with others sharing their step, style and rhythm – creates an affinity, empathy or sense of

belonging'. Whilst many refer to the social interaction and 'particular closeness' between humans created by walking, others suggested walking opens up a dialogue between mind, body and place and can be useful to explore the 'constitutive co-ingredience of place' (Anderson,2004: 259). Ingold (2010) suggests that locomotion is the key to actively apprehending and perceiving the world. So, walking across the New Forest was at the heart of my data collection. Lund's (2005) study of hiking in the Scottish mountains revealed that walker and landscape became entwined through the activity of walking as they made their way through a world in formation, not across the mere top of it.

Walking In

It takes a while to walk in

to walk in to a valley

to walk in to the feeling

of being at ease with yourself, with the land

and while walking in, there is a walking out:

out of concerns and out of body strain

with a loosening of spine, legs, shoulders, head

a slow unravelling into openness

that brings, with time

the sense of walking in

walking in to place

(Fraser, 2016:3)

…

4.11.2 Guided interviews

We used emplaced walking interviews as they attended to our commitment to correspond with the flow of events in a place as the world unfolded and emerged. We (co)responded with it, whilst collecting data in a participatory way. We conducted walking interviews as we travelled. These walking interviews created spontaneous, free flowing and naturalistic data from opportunistic, spur of the moment conversations and group discussions. They provided possibilities to record 'a confusing array of subjectivities, subtle changes of mind, ambiguities of feelings, ambivalences, misunderstandings and strongly held beliefs' (O'Reilly,2012:119). By adopting a passive interview technique, or what Hochschild (2010) called 'guided conversations', a more candid and informal approach to data collection was created that invited thoughts about place invitations and unfolding events (Crang & Cook, 2007). Our experiment did not attempt to extract information or interrogate informants to search for standardisation and the truth. We sought, instead, to embrace a diversity of relationships, ideas and activities that emerged within our fieldwork spaces.

It is acknowledged within conventional qualitative research that much interview data fails to 'understand people's *lived, situated practices'* (Rapley, 2004:29). I was concerned that the sensoriality of relational fieldwork practices might not be accessed through verbal interviews alone, as it could involve knowledge that was pre-linguistic. Tilley (2006:328) suggested escaping verbal discourse by focusing 'on doing rather than saying'. He suggested that 'the intimacy of bodily contact through all the senses' could be found 'in their practice and not in their talk' (Tilley (2006:328).

To address this, I explored an expanded notion of what it means to interview research participants inspired by the work of Adams & Thompson (2011) who have developed a range of practical posthumanist insights for interviewing objects. Adams

& Thompson (2011:734) refer to the etymological origins of the word 'interview' which was 'derived from the old French verbal noun *s'entrevoir*, composed of two parts: *entre*- meaning mutual or between, and *voir*, to see', which together mean 'to see each other, visit each other briefly, have a glimpse of.' In the context of Adams & Thompson's (2011) work to 'interview' the more-than-human is to catch insightful glimpses in action and relation with the human participants. So, within my study participants took opportunities to 'follow the actors i.e. to look for mediators making other mediators do things – human or non-human' (Latour, 2005:217). I was interested in 'the sociality around the thing that creates an entry point' for this research focus (Bruni, 2005:358). I found ways of noticing the networks of relations within the fieldwork spaces and what emerged from meetings within more-than-human/human assemblages.

In searching to illustrate the unfolding relationships within places I recognised the challenge of employing mobile data collection methods. It was difficult and perhaps impossible to escape the human-centredness of our experience. Jones & Hoskins (2016:84) suggested 'maybe this does not matter' acknowledging that 'method is an ongoing struggle' that involves 'constant connection attempts rather than a set of rules for procedure' within posthumanist enquiry. So, I explored some of these connection attempts through audio-recordings of individual conversations, group responses and conversations regarding invitational experiences. In addition, the participants were invited to take photographs that revealed their more-than-human/human encounters. I believe that using multiple forms of audio-visual equipment whilst on the move provided for an enriching data collection (Mannion, Fenwick & Lynch, 2013). Whilst I acknowledge these photographs could not capture the complexity or temporality of the unfolding assemblages of places, they seemed to direct the human participants' gaze and attention to multiple registers- a more-than-human world. The audio files were

professionally transcribed. Photographs were taken on iPads and facilities for storage via google documents was made available to all human participants.

4.11.3 Technology

Each participant was provided with an iPad to take photographs and videos of their intra-active experiences within fieldwork spaces. I have struggled throughout the study to consider the best way to share some of this audio-visual data. I have experimented with QR codes which required a QR reader to access them. I explored creating a OneDrive folder and sharing a link containing each research artefact. This has not been straightforward – University access expires, and this would deny readers' future access. I, therefore, set up my own personal OneDrive account which is protected by two step authentications to ensure security. Visual research methods, such as participatory photography, have recently gained popularity and offered my participants the opportunity to actively engage in collaborative relationships with each other, the more-than-human and the technology (Robinson, 2011). As Prosser & Loxley (2008:4) point out:

> 'visual methods can provide an alternative to the hegemony of a word and number based academy; slow down observation and encourage deeper and more effective reflection on all things visual and visualisable; and with it enhance our understanding of sensory embodiment and communication, and hence reflect more fully the diversity of human experience.'

Participatory photography enabled us to document and archive the fieldwork experience and take multiple shots which were stored and organised for possible editing later. This use of photography could be viewed as problematic. As Robinson (2011:117) explains photographs are 'fleeting, two dimensional moments cut from their place in space and time' which could be 'edited and re-contextualised' for display within

my thesis. Yet the camera cannot represent the reality of the experience rather it 'produces and stores 'frozen framings' of the lifeworld for later exposure and examination' (Thompson & Adams, 2013: 345). This freezing of the research moment in its temporal tracks could be viewed as fixing, capturing and making still the fieldwork space with an anthropocentric two-dimensional gaze. The frame chosen says more about the photographer than the subject photographed. It is also problematic as it prioritized the visual over other senses.

In taking a posthumanist view, the iPad technology involved within this study was viewed as entangled within the research assemblage. Inspired by Adams & Thompson (2016) I positioned the digital recording devices as 'participants (generating data through their presence and actions) and as 'co-researchers' (storing and sharing data)'; they were viewed as 'skilled observers' and 'listeners'. Whilst this could be viewed as anthropomorphism, Montgomery (2013b: [online]) suggested it may also be helpful in moving beyond the subject/object binary. For as Bennett (2010:99) points out 'a touch of anthropomorphism, then, can catalyse a sensibility that finds a world filled not with ontologically distinct categories of beings (subjects and objects), but with variously composed materialities that form confederations.' Thompson & Adams (2013:346) suggested that assigning this status to the technology 'helpfully brackets the humanist assumption of sole agency and reveals a more distributed fold of enactments.' It is hoped that in taking this view the digital technology and the photographs they produced could be included within ongoing, dynamic conversations within the research assemblage; conversations which paid less attention to the 'objectness' of things and more attention to the 'material flows and formative processes wherein they come into being' (Ingold, 2012: 431). In this way it is hoped the photographs opened 'perception to the vibrant entanglements, happenings, and intra-

actions' (Kind et al. 2014: 36) within fieldwork spaces, to think how geographical education might be if attention was paid to relationships with the more-than-human.

4.11.4 Participant sensing

Attending to fieldwork sites and attuning to the more-than-human elements within, involved taking a different view. Pickering (2005:31) described this binocular vision as 'seeing double: seeing the human and the nonhuman at once, without trying to strip either away'. Attentive engagement (Ingold,2000) within fieldwork spaces invited participants to immerse themselves in sensory activities in various locations over the weekend. Pink's (2009) key work on sensory ethnography helped me to rethink observation in order to pay particular attention to multisensory experience. This research focused on opportunities for geographical learning that were embodied, emplaced, sensorial and affective positioning geographical fieldwork as 'knowing in practice' (Wenger,1998:141).

We travelled 'listening to the invitational quality of things'; this is a heuristic research tool suggested by Thompson & Adams (2013) for 'speaking with things.' Thompson & Adams were writing here about digital technologies, but this felt like a useful approach for explorations of the physical world as it situated the more-than-human elements within landscape as living, sensate and inviting participation. Rather than 'speaking' for the more-than-human, this study explored engagement with the idea of thingly invitations. We travelled with this prompt (figure 14) to remind us:

Figure 14: A prompt for thingly invitations

Responding to 'the call of a thing' invited fieldwork participants 'to become swiftly caught up in the particular world it opens' (Thompson & Adams, 2013: 354). As Thompson & Adams (2013) acknowledge articulating such 'thingly invitations' provides a glimpse of the lines of relational force that are set in motion each time researchers enter the field. Each participant was provided with a folder containing paper, card, pencils, scissors, mirror, dentist mirror and iPad to aid participant attention and responses to fieldwork experiences. An example of the contents can be seen below in figure 15:

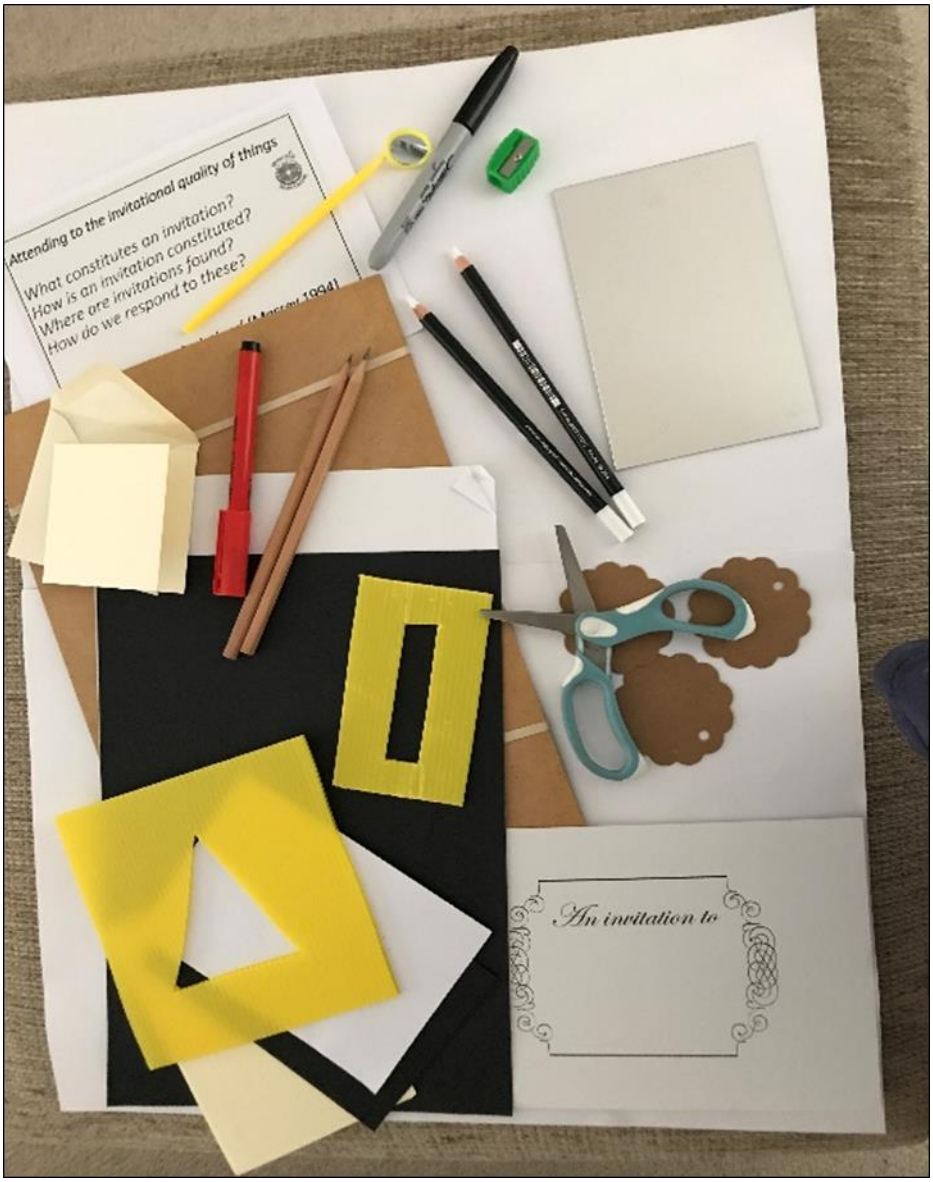


Figure 15: Toolkit to attend and respond to place invitations

The invitations and responses were recorded via words (descriptions, poems and graffiti boards can be seen in figure 16), mapping, found objects/items, model making, photocollages, and photographs sharing responses and emerging relationships.

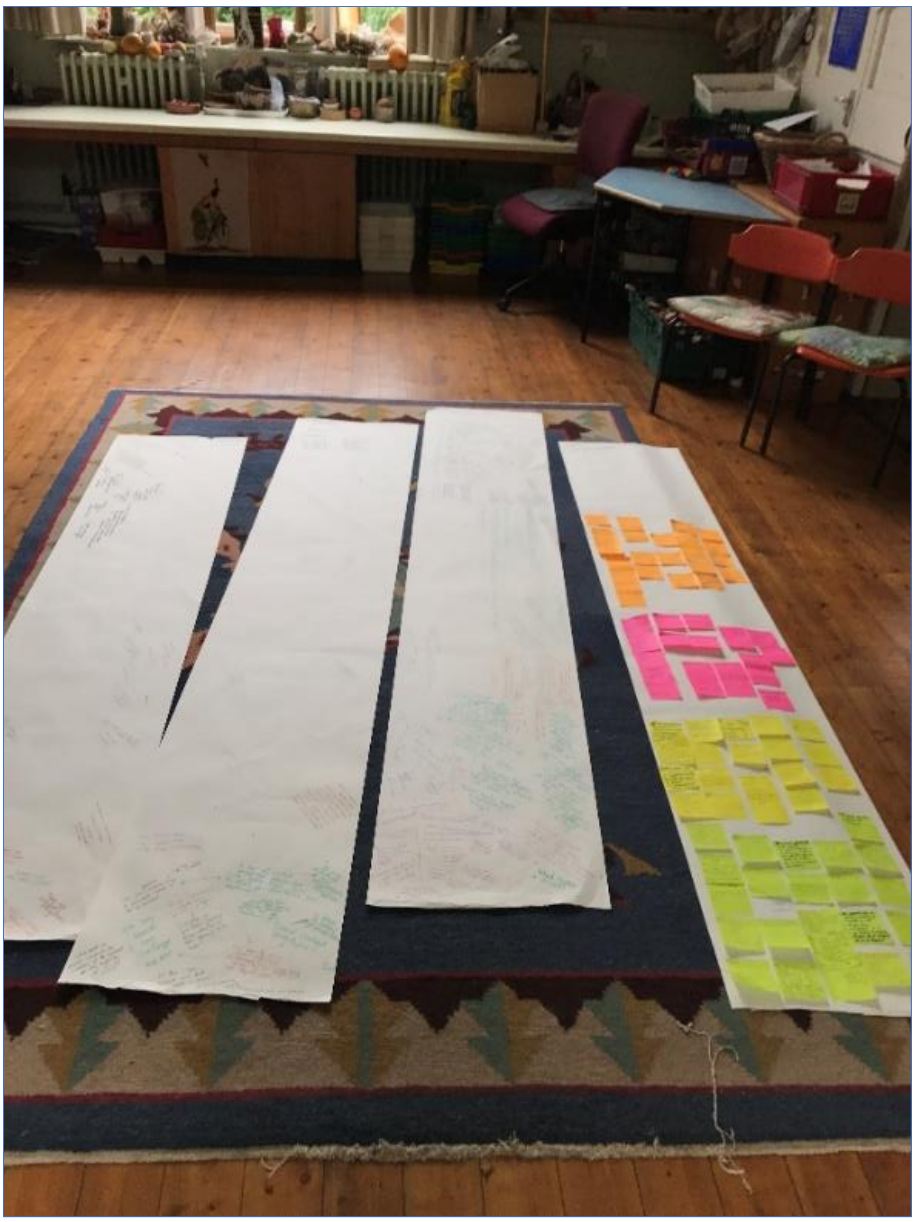


Figure 16: Examples of Graffiti Boards

A sustainable art ethic was adopted for materials for group responses i.e. best efforts were made to ensure materials for recording would be non-toxic, natural in origin or made from recyclable materials. With participants' agreement and permission audio and written pieces were transcribed, as was the community discussion.

4.11.5 Emergent mappings

Inspired by their shared relational experiences of place invitations from the fieldwork event participants (figure 17) engaged in emergent mapping (Kothe,2016).

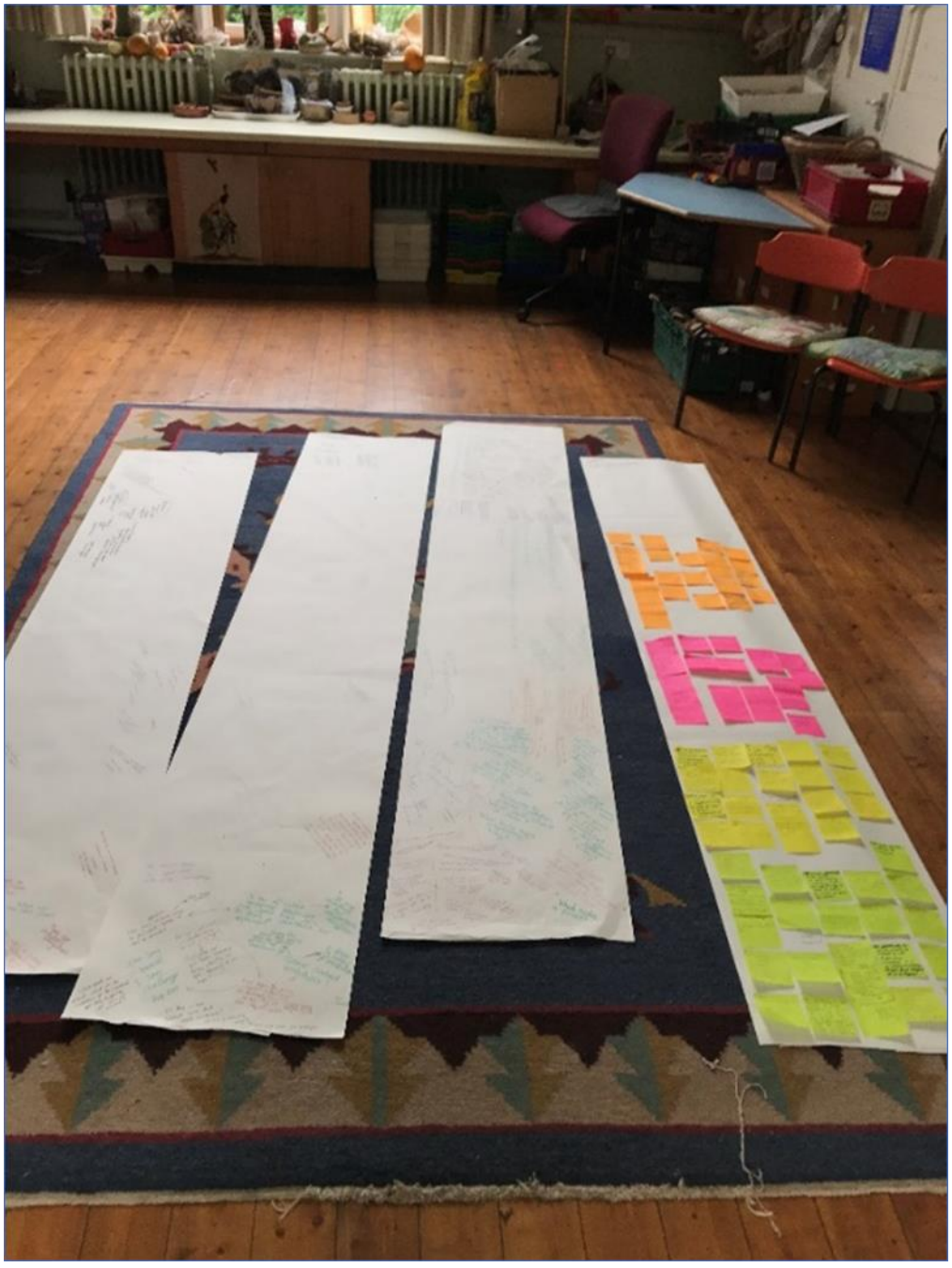


Figure 17: Paper-table-geographer-biscuit-water-pen-research assemblage

Emergent mapping was appropriate for a contextual and place-based practice as it enabled provisional mappings of activities and relationships emerging between places, practices and fieldwork participants (Higgins, Madden, Berard, Kothe &

Nordstrom, 2017). It offered possibilities to create a rich record of the sensory, embodied and affective encounters between the more-than-human/human that took place within fieldwork spaces whilst providing a flexible approach that could respond to the contingencies of the fieldwork event and locations. The emergent mapping process shared the collective experiences of our fieldwork intra-activity that emerged through words, pictures, photographs, objects. This emergent cartographic approach would enable participants to note relationships forged and share experiences that emerged from place invitations. This data collection method originated from the work of Kitchin & Dodge (2007) who drew on theories of post-representational mapping. They shifted thinking regarding maps as representation of information and suggested that 'maps are of-the-moment, brought into being through practices (embodied, social, technical), *always* remade' every time they are engaged with. So, in this context maps were 'transitory and fleeting, being contingent, relational and context-dependent' (Kitchin & Dodge, 2007: 335).

Through the research process participants were informed as to the purpose of emergent mapping, how the maps and recordings would be used in dissemination and it was made clear that they were free to withdraw from the mapping activity at any time. The researcher contributed to the emergent mapping process in negotiation with the other participants and intra-acted with the finished map within the curating and folding stages of the study; I did not seek to direct the content of the map. The multimedia sensory data and outcomes of emergent mapping were recorded in the photograph (figure 18) and as a time lapse video to attend to the process in-formation. A time-lapse video of the map in creation can be viewed here: An emerging map of our New Forest fieldwork (digital file 2).

Figure 18: Emerging map in-formation

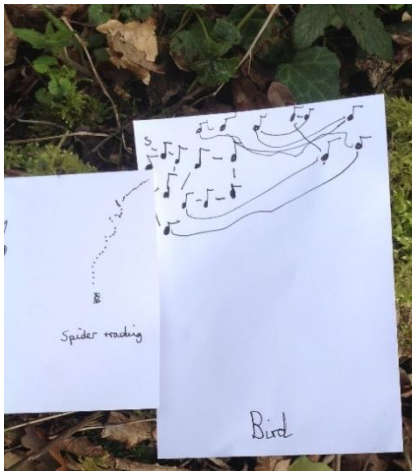
Maps enabled participants to become lost once again in the fieldwork space providing an opportunity to 'resee experience, to perceive experience again' (Irwin, 2006:79) and allowed rumination on the invitations encountered in space through narrative, drawn, illustrated, curated and mapped fieldnotes. This emergent mapping acted as a record of attention and relations and a marker of participation (Kothe,2016). These maps were not intended as representations of what happened. Instead the maps were situated as part of the emergent process of exploring intra-actions and place invitation practices.

4.11.6 Preparing for community travel

Whilst my human participants brought a wealth of knowledge and experience of geographical fieldwork, I was aware that most of my co-researchers were unaware of posthumanist/new materialist theoretical perspectives. To enable the geographers to meet and become familiar with the site of the study centre (their base for three days) they undertook some familiarisation activities (see figures 19-21) to help explore, make connections and build relations with the local more-than-human elements in preparation for the 'mingling' phase of the study. This also enabled human participants to experiment with some of the technologies and approaches they might use during the study.

Figure 19: Familiarisation activities around the study centre site

Follow a thing



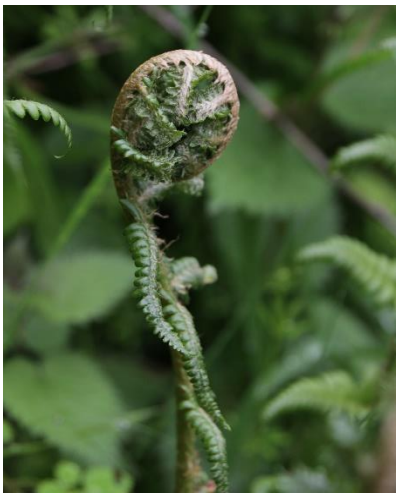
Map your response

Walk the Minstead Maze

A moment of quiet

contemplation for the day ahead

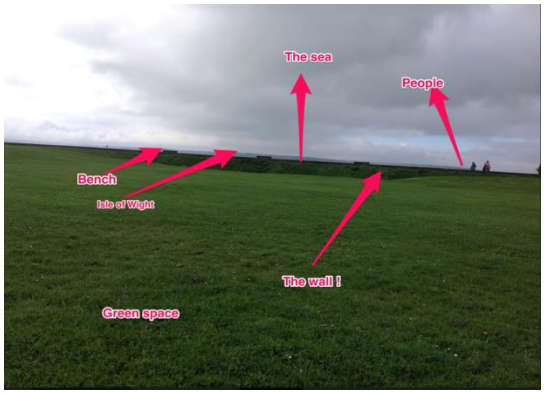
Wander and explore the site take photographs of things that particularly capture your attention.



Potential to open?

Can you add a caption to one photograph?

Wander and explore the site take photographs of things that particularly capture your attention.



Can you label elements of interest within the photograph using the skitch app?

Figure 20: Coming to know fieldwork spaces (sheet 1)

Wander and explore the site take photographs of things that particularly capture your attention

Create a collage using the pic collage app

Remember to save to your library

Sit somewhere quietly and create a soundscape.

Collect a sound file from somewhere around the Minstead site
Use either Voice Record App or voice memo on phone

Remember to give a title to the file that explains what / where the soundscape was taken

Explore the sensory offerings of the Minstead site
Spend some time enjoying the Minstead sensorium

Consider collecting and writing some words, a description or a poem

Record a conversation had whilst moving around the site at Minstead on Voice Record App or voice memo on phone

Figure 21: Coming to know fieldwork spaces (Sheet 2)

4.12 Honouring posthumanist perspectives

I am keen that my study uses theory and research to help consider nurturing relational fieldwork practices with the more-than-human elements and make contributions to geographic knowledge and understanding. In engaging with posthumanist thinking I have tried to explore the experience of geographical fieldwork through methods that are not interested in 'conventional epistemic objects' (St Pierre, 2016:34) but in 'the concrete richness of the sensible' (Deleuze & Parnett, 1977/1987:540). In being explicit about my approach to the posthumanist education practices I have been guided by others currently working in the field (Rautio, 2013; Malone, 2015; Pacini-Ketchabaw et al. 2017). Payne (2016:171) suggests '[w]e do our best' with this problematic work recognising that more-than-human worlds are 'invariably inaccessible and affectively 'non-representational' be they in policy, curriculum, pedagogical and research makings'.

My study does not set out to make claims regarding geographical knowledge that is real or true. It is not intended to be generalisable or replicable as it is fleeting, contingent and unique; an event of the moment in the presence of others. Rather than seeking universal principles, my study honours posthumanist ways by positioning humans not as 'an autonomous and elevated entity,' but as:

> 'one more animal, utterly dependent upon a host of other plants, animals, and inanimate matter to survive, precariously balanced on a finite world' (Brisini & Simmons, 2016:193).

I aim to produce new more complex, ecological and relational ways of thinking and doing geographical fieldwork. To be transparent I provide details of the fieldwork processes and procedures to share my posthumanist attempts openly and honestly. This decision is not intended as a recipe for others to follow but may provide glimpses

into my attempts to explore how geographers can expand their practices to know and act in a more-than-human world, while being already in and part of that world. I have decided to name the location of the New Forest, the environmental Centre Minstead and other fieldwork sites where encounters occurred. Like Macfarlane (2017: [online]), I have come to realise that 'names matter, and that the ways we address the natural world can actively form our imaginative and ethical relations with it'. This doctoral journey has taught me that 'words possess a remarkable power to shape our perceptions' and I am keen to name the fieldwork spaces in order to give them detail to avoid them becoming quickly blurred into 'a generalised wash of green – a disposable backdrop or wallpaper' (Monbiot, 2017: [online]). Inspired by indigenous research methodologies, naming was a conscious decision to acknowledge the agency of the fieldwork space and the more-than-humans that actively shaped my research 'encouraging certain connections, suggesting themes, propelling activities, opening possibilities, and sometimes closing them off' (Wright, Wright, Lloyd, Suchet-Pearson, Burarrwanga, Tofa & Bawaka Country, 2012:41).

So, this chapter has sought to consider my experimentation with uncertainty by paying attention to the material-affective dimensions of doing, and engaging with, geography. It was a collaborative project of attunement, attention and entanglement of more-than-human and human others. The uncertainty of thinking was beautifully described by Karen Barad (2012:2) as:

> 'stepping into the void, opening to possibilities, straying, going out of bounds, off the beaten path— diverging and touching down again, swerving and returning, not as consecutive moves but as experiments in in/determinacy'.

As a researcher this loss of control and certainty was daunting, yet an exciting challenge to open ways of thinking fieldwork spaces differently. For as La Quesne

(2015:103) recognised ‘to experience a new perspective with reality and to be sentient to such developments represents a significant adventure’. The following chapter aims to detail my efforts to work ‘my bewilderment for all it’s worth’ (St. Pierre, 1997:281) as I embark on an adventure into the unknown of post-qualitative analysis…

Chapter 5 – ~~Analysis~~ Terra Incognita

'*We should learn to navigate on a sea of uncertainties,*

sailing in and around islands of certainty…'

(Morin,1999:3)

5.1 Seeking to find new territories

As I sat down to undertake what is called 'analysis' within traditional humanist research I realised I was unsure of how to proceed in taking a posthumanist/new materialist perspective. Confusion was created by the mix of research artefacts, all stored in different ways on a range of devices, collected by participants over three days. This section details my commitment to getting lost (Lather, 2007). I adopted an optimistic and energetic approach to taking the plunge into my data (Taylor, 2016a) seeking to immerse myself in research enactments in the hope of leaving 'the door open for the unknown, the door into the dark' (Solnit, 2006:6). Tsing (2013: 28) reminded us that 'opening a door is a specific kind of intellectual task, requiring imaginative leaps as much as data and argumentation'. I worked from posthumanist perspectives engaging in expansive experimentation with my 'data' to embrace what Braidotti (2013:137) called 'potentia'. Paying attention to relational and material practices helped to explore 'new potentialities' for different ways of being, doing and thinking (Anderson & Harrison,2010:19) within fieldwork spaces. I tentatively moved forward holding on to Solnit's (2006:14) assertion that 'never to get lost is not to live'.

5.2 The challenge of representation

In seeking to navigate my way through the terra incognita of my data I was inspired by Deleuze & Guattari ([1988]/2013) to engage in practices that were productive (mapping) rather than representational (tracing). Jackson and Mazzei (2012:12) suggest 'to chart this unnamed unmapped territory is to deterritorialise data,

deterritorialise theory and deterritorialise ourselves'. This deterritorialisation resisted traditional known qualitative research routes which could lead to a simplistic data analysis that reported participants' accounts of experience as knowledge. I wished to avoid the humanist tendency to make meaning from our fieldwork experience data. As Pickering (2005:30) warns 'meanings are in our heads and in society; they are not in the material world'. There was no way of checking the truth of our knowledge with the world presumed to be lying beyond our experiential interface, because to do this, we would need access to such a world that did not involve our experiencing it. As Derrida (1976:159) pointed out 'meaning cannot be closed off and contained in language, meaning always escapes.' In 'spaces of intra-activity' (Lenz Taguchi, 2010) where materials, animals, humans, spaces, places, ideas are all entangled post-qualitative analysis respects that 'we can't fully comprehend what is happening' (Kind et al. 2014:35).There are some things which are not-yet-known and I have tried to embrace the notion of living with mystery. So, I decentred my desire to know 'in favour of becoming subject to a chaotic experience through which something new could emerge' (Clark/Keefe, 2014:791).

It was not possible, or ethical, for me to try to accurately represent the more-than-human. I wished to avoid what Deleuze referred to as 'the indignity of speaking of and for others' (Rajchman, 2000:97). Haraway (1992 in Whatmore, 2002:158) considered that 'representing the nonhuman leaves them, at best, looking like lesser humans.' I hoped to disrupt the hierarchy of the knower as human and the emphasis on language and discourse as a way of sharing understandings of the world (Lenz Taguchi,2014). Yet I recognised the tensions that emerged from the 'methodological bind' of my posthumanist tendencies as there was a need to acknowledge the multisensory, embodied and affective aspects of practices alongside the requirements of a doctoral

thesis ‘to use discourse to register things that exceed discursive capture’ (Gallagher, Prior, Needham and Homes, 2017:1256).

I have sought to move my ‘analysis’ beyond coding to look at alternatives to representationalism. In pursuing the idea of thinking differently about fieldwork spaces I have considered Mazzei’s (2014:742) thinking that ‘there is more to data analysis than a reduction of research narratives to a series of thematic groupings.’ I have tried to shift my attention from ‘questions of correspondence between descriptions and reality to focus on the ‘things-in-themselves’ (Pickering 2005:30). Therefore, I ventured into new, unknown territory where research practices considered the material, relational and connecting intra-actions between more-than-humans and humans (Fox & Alldred, 2015). I aimed to travel with and ‘map the lively commotion of … worldly associations’ thinking about how invitations within the fieldwork space helped us negotiate ‘modes of access and ways of orienting ourselves to the concrete world we inhabit’ (Bingham & Thrift, 2000:292). By opening up to vibrant entanglements of matter and discourse I wanted my ‘analysis’ to carefully, ethically, and attentively respond to complexities and nuances of relations in geographical fieldwork spaces. Leaving the old familiar ways of qualitative research in order to get lost in the ‘stuck places’ (Lather, 2007) of post-qualitative analysis was daunting. By shifting from needing to know to making ‘room for otherness and conceptual creativity’ (Blaise, 2016:618) I have sought to reterritorialise fieldwork spaces as inclusive, democratic and relational in order to survey and map new and unknown territories within geographical education.

5.3 Diffractive Analysis

Posthumanist analysis is new, unknown and uncertain territory. Although there is a growing body of theoretical posthumanist research within the field of education,

details of practical application and the analysis processes often remain sketchy. St Pierre (2011:622) shares her view of how post-qualitative researchers begin to work within a researcher-data assemblage:

> 'I imagine a cacophony of ideas swirling as we think about our topics with all we can muster—with words from theorists, participants, conference audiences, friends and lovers, ghosts who haunt our studies, characters in fiction and film and dreams—and with our bodies and all the other bodies and the earth and all the things and objects in our lives—the entire assemblage that is a life thinking and, and, and . . . All those data are set to work in our thinking, and we think, and we work our way somewhere in the thinking.'

I have taken up the idea of a diffractive analysis (Lenz Taguchi, 2010). A diffractive analysis acknowledges that once data enters the researcher–data assemblage unexpected, unpredictable and entangled encounters happen. A collaborative form of analysis sought to think beyond the individual and to shift and disturb the researcher's understandings through spending time in the company of others (Lenz Taguchi, 2010). A diffractive analysis illuminates differences as they emerge: how different differences get made, what gets excluded, and how these exclusions matter (Barad, 2007:30). Willis (2014) suggests diffraction offers a useful metaphor for thinking about similarity and difference when combining research techniques: how do the 'findings' produced by various techniques interact, overlap, and constructively and destructively interfere with one another?

In thinking differently with data, diffractive analysis becomes both an ethical and a political concept and supports an exploration of the conditions needed to create open, inclusive democratic and relational fieldwork spaces within geographical education.

Throughout the study I have sought to 'envision difference differently i.e. theorising a different difference' (Thiele, 2014:203). Thiele (2014:203) proposed 'a thought-practice in which concepts are not abstraction *from* the world, but an active force *of* this world – and thus always/already implicated in and concerned with world(ing): practicing and envisioning specific practices for this world'. By fronting ethical concerns with difference, I embraced Barad's ethico-onto-epistemology of difference which pays attention through the data to 'relating in difference' (Thiele, 2014:203).

5.4 Acts of attention

Through acts of attention from within the researcher-data assemblage I have followed some of the intra-active engagements, encounters and relationships that emerged as we journeyed across the New Forest. As Fleet, Patterson & Robertson (2017: 87) reminds us 'the ways we attend to things matter'. I was conscious that as 'the human I of the researcher' (Somerville, 2016:1167) it was significant where attention was directed within the assemblage. I did not want, and indeed question whether it is possible or even desirable, to remove completely the human subject from the study. I sought to decentre rather than remove humans believing that alongside more-than-human others, the geographers who participated in the study contributed to relational fieldwork spaces.

Through acts of noticing I sought to dwell within the liminal space; the space between the more-than-human and human, between the known and the unknown. Working in these in-between spaces was a political act. As Hannah (2013:248) points out the 'directional selectivity of active attention' inevitably leads to a 'political conception centred upon the question of what it is that we turn our attention towards and away from, as well as who or what it is that determines this turning up'. It was

important to consider what paying attention does within these data–researcher assemblages and what is produced through intra-action.

5.5 The potential of data

Following the fieldwork weekend, I was surrounded by an extensive heterogeneous collection of activities, thoughts, photographs, videos, sound files, graffiti boards, drawings, written notes, poetry, emerging maps and transcripts. In my office I sat missing the New Forest Landscapes- the Ford, the Heath, the bog, the woodland, the fire. The camaraderie and community of place and people were no longer present. I felt detached and isolated. I was lost… My data collection, although numerous, felt partial and incomplete, as was always going to be the case in the writing of the thesis which occurred over a period of months after the event. I found myself drawn back to the landscapes as I curated, created, wrote and edited my work slowly engaging once more with material and sensorial qualities of fieldwork places. I found myself thinking with the New Forest landscapes: paddling in the stream at the Ford, wondering if I could have climbed the 'Medusa' tree in my youth, jumping in the Ford, looking for shelf fungi, marvelling at the moss, walking tentatively across the bog and tickling the nose of the 'dragon tree' once more. This attention brought the data continuously to the fore. Ljungberg et al. (2017:2) encouraged researchers to 'think data beyond anthropocentricism toward different human and non-human forces creating, generating and reproducing knowing, affect and sensory experiences.' So, my data was produced within relationships from different experiential and material encounters (Ljungberg et al. 2017; Coole & Frost, 2010) within the geographical fieldwork spaces.

I was acutely aware that in this data-researcher assemblage an extensive range of things were deeply implicated in my study. These included locations, animals and

other living things, materials, including fieldwork paraphernalia e.g. mirrors, iPad frames, miniature people, string, wool, luggage tags, rucksacks, pencils etc., atmospheres, weather, moods, emotions, traces, memories etc. On my return from the fieldwork weekend I began by looking through the data artefacts to see what I had collected. I sent the audio files and graffiti boards to be typed up so emerging ideas were easier to access. I checked and annotated them and stored them systematically in files on the computer. I organised folders for my photographs into days of the event- Friday, Saturday, Sunday and site locations e.g. Ford, Acres Down Heath, Bog etc. I was managing my data and organising it into named/themed research folders on my computer for my convenience. It made me consider whether I was privileging written notes, transcribed recordings of data and visual data, such as photographs and videos, whilst 'overlooking the bits that nudged and pinched … from the shadows' (Holbrook and Pourchier, 2014:754). I realised I was 'seeking to tame my data' (Koro-Ljungberg, Carlson, Tesar, & Anderson, 2015:615).

This awareness stopped me in my tracks. I felt dreadful that despite my reading on post-qualitative analysis my humanist tendencies to take control and dominate had persisted. It made me fully appreciate the challenge of living posthumanist/new materialist enquiries. I realised I needed to resist 'relegating the data… to a subordinate role' (Koro-Ljungberg, Löytönen & Tesar, 2017:4). Throughout my analysis I have tried to be constantly on my guard for the ever present tension between posthuman/humanist perspectives. I have tried to remain critically engaged questioning and troubling the notion of data as the creation of the privileged human (Koro-Ljungberg et al. 2017:3). I found myself questioning how best to place myself in the middle of all of this to gain glimpses of what emerged within the New Forest

fieldwork event. I wished to recognise 'the wonder of the data' within my study. Maclure (2013:229) makes the point that:

> 'It is not clear where [wonder] originates and to whom it belongs. It seems to be 'out there,' emanating from a particular object, image, or fragment of text; but it is also 'in' the person that is affected.'

Data within the data-research assemblage had potential. This study was committed to the idea that 'something is always produced in …acts of attentiveness' (Pacini-Ketchabaw et al. 2017:81), so data was positioned as emergent within collaborative, co-constitutive geographical fieldwork practices.

5.6 Curating

The processes of mingling, curating and folding through this study reflected my commitment to experimentation and speculation from within the data-researcher assemblage. In seeking to generate some 'emergent workings out of affective, material and spatial happenings' (Taylor, 2016a:21) I engaged in acts of curation. Curating suggests mobilising, gathering, collecting, organising, selecting, assembling, creating, and cutting. The word origin of curating comes from the Latin 'cura' meaning to care or to look after (Gilbert in McFall, 2013: ii). Curation was an action-orientated process in which I experimented with different ways of following the data thinking through narrative writing, theory, collage and poetry to explore 'new connections' sparked 'among words, bodies, objects, and ideas' (Maclure, 2013:229).

For this study curating was undertaken through written stories of relational experiences and collage - all considered alongside theory (5.6.1 and 5.62). The messy and fragmented curation efforts reflected the researcher's efforts to embrace plurality and set the data to work in a varied range of contingent and temporary ways. The approaches were embraced purposefully to juxtapose collaged data with written

narrative to disrupt the norms of traditional approaches to data analysis and to play with ideas of doing things differently. The place of each approach will now be considered to make explicit what I did in the analysis. I do this not to prescribe methods for the analysis undertaken, but to ‘do my best to perform it for others as an invitation into their own explorations of how they think’ post-qualitative analysis (Holbrook & Pourchier,2014:762). With this in mind, I created invitational spaces within the thesis to ask the reader to bring their thinking and experiences into the data–research assemblage. These will appear as handwritten notes on handmade paper created from renewable plant sources. Rose, marigold and cornflower petals are embedded within the paper and interrupt and disrupt the handwriting. It is hoped these notes offer a moment for the reader to linger among the pages, among the data … to get lost in the spaces of the fieldwork-research-data assemblage.

Dear Reader,

I invite you to enter the data-research assemblage and join an on-going process of experimentation. As you read this thesis you may begin to make your own connections, building relationships with ideas based on your experiences, contexts and thoughts. This is not a research study that claims to have the answers, but an exploration of ideas that welcomes your engagement with the process.

At specific points within this enquiry I aim to draw your attention to something that mattered in the fieldwork space. This is for you to intra-act with, think about, ignore or respond to.

Thank you for your participation

kind regards

Sharon Witt.

5.6.1 Relational stories

Within the study I shared relational stories that are written as critical collaborations of data and theory to open up enquiry. In the light of my critique of language being a dominant mode of humanist research this may seem like an unusual choice. However, as St Pierre (2017b:5) stated 'in writing, we can and do, invent and reinvent the world'. This was not about stopping the enquiry and representing the findings through writing in order to repeat the data and share the field experience for the reader (St Pierre, 2017b). My stories were intended to be an assemblage of emergent voices, materials, things and writings that take my thinking forward in unexpected ways. As Deleuze (1997:225) suggested 'to write is certainly not to impose a form (of expression) on the matter of lived experience'. Rather this writing is about sustaining the enquiry through constant questioning and intra-action within the researcher-data assemblage. This positioned the writing within my analysis as dynamic, emergent and becoming (Richardson, 1994; Richardson & St. Pierre, 2005). 'This writing is an adventure, experimentation, pushing through toward … the unintelligible …toward Deleuze's pure difference, perhaps a new world' (St Pierre, 2017b:3). St Pierre (2017b:4) suggested 'the real becomes a provocation to continue, not a foundation for stability'. Through writing and collaging the research fragments I undertook a 'groping experimentation' (Deleuze & Guattari,1994: 41) with a multiplicity of ideas which sought to leave some things unsaid, list materials to foreground their presence and provide multisensory descriptions to decentre the human. I hoped this would invite knowing to emerge in the moment, in relation with the fieldwork community and the connections that emerge in the in-between spaces.

Collective stories in fieldwork spaces were co-generated to share the miscellany of encounters with things, ideas, places. The notion of relational stories seemed

appropriate as storytelling has been celebrated by posthumanist authors including Barad (2007) and Haraway (2016); stories are a way to help us respond better 'within and as part of the world' (Barad, 2007:37). To begin my storying experiments, I spent time with fieldnotes, transcriptions of conversations, audio and video files, memories of the experience, graffiti boards and emerging map data and I just wrote. Sometimes it was a matter of sharing questions raised as a poem; at other times it was selecting part of an audio file to share with the reader. It was the writing of an event or relationship that seemed significant. At times the writing seemed messy. I wrote different stories spontaneously letting the data and style flow, but constantly mindful of the complexity of documenting and writing posthumanist fieldwork spaces. My texts seemed to be launching in all sorts of directions taking different lines of flight. I realised at times I was being playful with different writing styles, fonts and layouts, whilst at other times my writing seemed more conventional.

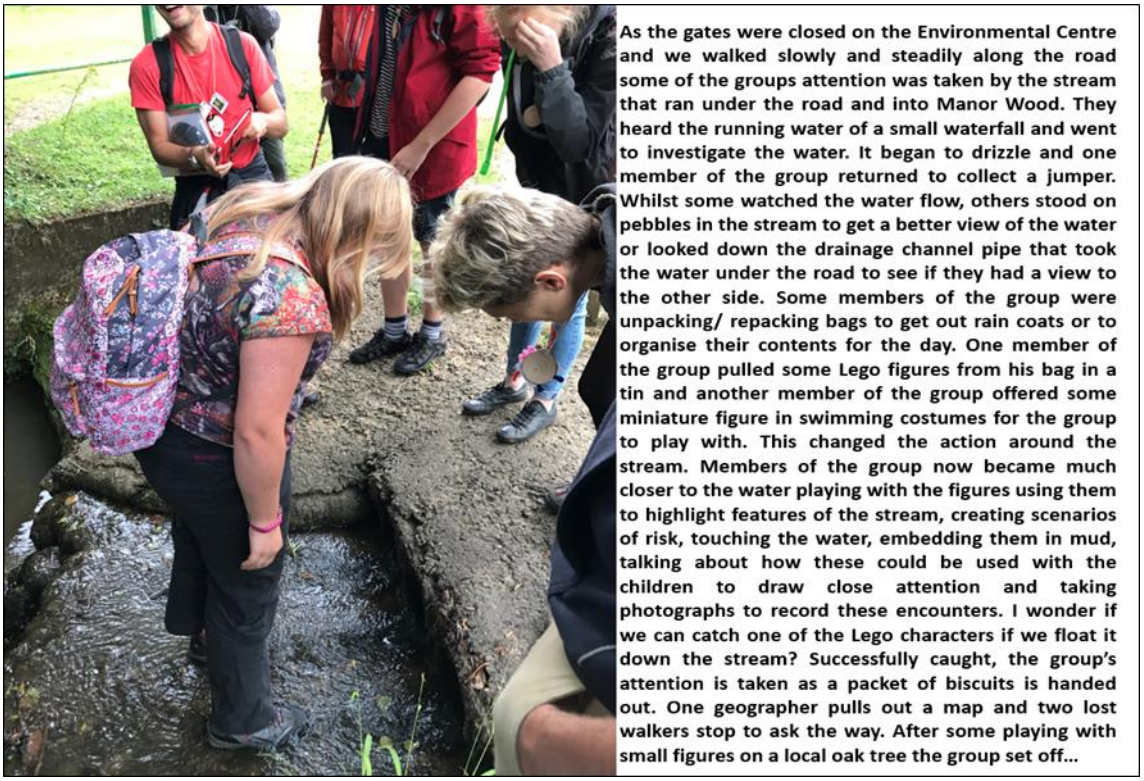


Figure 22: A stream-geographer-writing assemblage

Figure 22 was quite a descriptive piece of writing seeking to foreground the material elements within the space. Other experiments were more poetic, such as the found poem below in figure 23, created from text in the group blog that shared formative experiences of the human participants:

Figure 23: Wondrous Landscapes

Some written experiments were imagined. Scenarios with miniature figures were played out by a stream and re(imagined) within a British Broadcasting Corporation (BBC) rolling news headline (figure 24):

Figure 24: Breaking news – a playful writing experiment

The different kinds of writing sought to engender different 'ways of attending, responding and relating' across 'disparate geographies' (Kenney, 2016:75). These story fragments do not claim to be anything other than examples of writing experimentation. But as Haraway (2016:12) reminds us, 'it matters what stories tell stories…it matters what thoughts think thoughts…it matters what worlds world worlds.'

I began to 'learn to trust writing to take me somewhere I couldn't go without writing' and 'I learned that writing was indeed thinking' (St Pierre, 2017b:3). I was keen to sit down at the beginning of every day to see what emerged. Like St Pierre (2017b:4), 'I made the field as I wrote.' It was not possible to view the writing within my study as 'a stable configuration or a fixed task' as it kept changing, moving, transforming and transgressing throughout different interrelated events and collaborative extensions' (Löytönen, Koro-Ljungberg, Carlson, Orange, Cruz, 2015: 26). I sometimes played, strayed, toyed, dreamed the 'data'. I recognise within traditional qualitative research paradigms this is problematic because it is not good to 'veer too far off the path – to include odd categories, to do things out of order' (St Pierre, 2017b:1) or to fail to produce an 'audit trail' from official data to my writing. However, I hope I have communicated clearly the thinking behind my processes.

Dear Reader,

In the following chapter I have shared multiple stories of fieldwork spaces as assemblages. These are stories of meetings between more-than-human/human participants within a New Forest fieldwork event. They tell of diverse sensory, embodied and affective encounters focusing on what emerges through intra-activities.

This approach moves beyond the obvious, the familiar and business-as-usual in order to think beyond immediate human concerns. It recognises the contribution of more-than-human elements that produce their own worlds in relation to others, including humans.

I invite you to consider encounters with a place you have experienced recently... Think about:

- Where was the place located? What was it called?
- What other 'things' were present?
- What meetings did you have?
- Were these meetings with more-than-humans/humans?

- What caught your attention?
- What activities did you undertake in relation to this place?
- What did you see/hear/smell/feel/sense?
- How did you move around the environment?

- If you were engaging in a writing experiment how might you record your encounters?
- How might the event unfold within your own writing?

Perhaps you might be inspired to begin your own writing experiment about a recent engagement with places, materials, weather etc.

The stories we tell matter...

Kind regards

Sharon Witt

5.6.2 Collage

As well as writing experiments, I have chosen collage as analysis. I included collage within my curating process as it enabled me to become 'playful, explorative and expressive with the data' (Irwin, Springgay & Kind, 2005:897). Ingold (2013:21) suggested that making was a process of growth which positions the maker from the outset as a participant in amongst a world of active materials. Within this study, making from inside the researcher-data assemblage enabled the researcher to 'continually answer to the fluxes and flows of materials' during analysis (Ingold 2013:6). The collages became emergent spatial-material records of our intra-active happenings in fieldwork spaces foregrounding 'agency as posthuman commotion of co-activity' (Taylor,2016a:21). With some trepidation I engaged with the following process to see what emerged.

I curated:

- transcriptions of conversations and printed out relevant parts
- photographic images and printed and cut them out
- excerpts from graffiti board and emerging map data and cut/tore specific sections to bring others into the data assemblage
- other 'found' artefacts – pictures, poetry
- relevant readings from an ongoing, collective exchange with theorists to show commitment to scholarship
- words to identify those present within the assemblage
- words to identify the intra-activity emerging from more-than-human/human in-relation.

Once this collection of 'material-discursive noticings and notings' (Clark/Keefe, 2014:792) was made I began to set about cutting, tearing, (re)arranging, (re)moving,

layering and experimenting with multiple media adding colour, texture, images and words. I explored possibilities of collaging via various apps. The technology helped with the presentation and could illustrate place assemblages. Here is an example of our adventures in Wick Wood (figure 25):

Figure 25: A photo-collage of Wick Wood encounters

The photographs here felt as if they were (re)presenting/describing the place, but there was no commentary and no provocation for intra-action with the activities, the photographs, the place. It felt very static and distant from the fieldwork space. It did not seem to share the liveliness of the place assemblage. I made the decision to engage physically in experimenting with mixed media collage. This felt qualitatively different. I felt more implicated in the process – it actively engaged me physically, emotionally and sensorially with the research fragments and theory to create openings within my thinking to explore and experiment. I also found that it disrupted the linearity of some of my writing sections upsetting chronological happenings, embracing an intentionally chaotic and messy approach. I feel it is important to acknowledge that this process was not unproblematic. Themes seemed to emerge

from the data, but it made me wonder whether they were a form of coding which was an approach I was seeking to resist.

This section of the thesis was not designed to be a linear 'how to collage' guide, but hopefully gave some indication of the multi-layered processes undergone often in simultaneous and spontaneous ways. Gathering such a diverse set of materials from 'different worlds into a single composition' called attention to the 'irreducible heterogeneity' (Kilgard, 2009: [online]) of the fieldwork space. It was intended to acknowledge there are multiple ways of knowing and different entry points into accessing more-than human/human intra-activity. As each new element intra-acted within the collage it enabled 'matter [or data] to become expressive, to not just satisfy but also to intensify—to resonate and become more than itself' (Grosz, 2008:4). New possibilities emerged and contributed 'another magnitude of resonances, producing more and more possible readings' (Kilgard, 2009: [online]). The resulting collages became part of the data-research assemblage.

Collage has been one of the most uncomfortable parts of the study as I felt some tension between the aesthetic and research roles. I was concerned whether my collages would show my scholarship and meet expectations of academia and posthumanist research practices (Koro-Ljungberg, 2016). By staying with the unease and lingering over the data I tried to stay with the 'stuck places' of the research. It helped not to think of collage as an individual effort, but as a collaborative endeavour– a multivocal, heterogeneous engagement with the fieldwork community. The collages enabled the researcher to 'become part of the world in its differential becoming' as 'these materials think in us as we think through them' (Ingold, 2013:67). The collages in this study are not intended to be static representations of fieldwork spaces, nor provide any simplified explanations to what happened within the New Forest event

instead they are playful experimentations with data and thinking. These appear as figures in chapter 6; folded within the paper copies and as photographs within the electronic copy allowing readers to use magnifying tools to look in more detail. Although the collages can be fixed in a photograph and shared within the study, they are not viewed as completed, but as on-going continuous projects.

5.7 Failing productively

In resisting the linearity of traditional qualitative research processes, this thesis embraces the idea of 'productive failure' (Koro-Ljungberg, 2016). Within this interpretation, failure does not mean a position or skill that 'does not meet specific criteria, external evaluation or social expectation' (Koro-Ljungberg, 2016:101). Failure is often seen as a problem within education and this study seeks to reimagine the idea of 'failure' (O'Donnell, 2014). Inspired by Koro-Ljungberg (2016a) I seek to use the term 'productive failure' as a way to 'work against finality, completion and extreme methodological purification and predictability.' She considers O'Donnell (2014: 263) who refers to the work of the playwright Samuel Beckett and suggests perhaps failure should be 'something that we do rather than being something that we are.'

In seeking a posthumanist/new materialist approach for the first time within geographical education my research was taking new paths that were 'risky' and 'experimental' and perhaps I have failed to make my study 'look much like research' (St Pierre, 2017b:4). Analysis within posthumanist perspectives involves immersion in uncertainty. As much of the writing and collage emerged through entanglement with data it was difficult to share exactly what I did. It felt an intuitive process. Inspired by an idea from Löytönen et al. (2015:26) I did try to '(un)successfully map the becoming' of my relational fieldwork experiment (figure 26).

Figure 26: (Un)successful map of my fieldwork-research assemblage

I had tried to 'map' the research-data assemblage, that is the things present, the intra-activity that emerged and connections with theory. I often found myself lost during its formation, found myself troubled by the singular human construction of a collective experience. It reminded me that in adopting an ethico-onto-epistemological stance I could not 'presume the separateness of any-'thing', let alone the alleged spatial, ontological, and epistemological distinction that sets human apart' (Barad,2007:136). My map attempt felt unsatisfactory for my non-representational purposes. I should not have tried to capture or represent the totality of our New Forest fieldwork experiences. Yet it revealed the complexity and interrelated nature of the fieldwork space. There

was always a fear that my experiments prompted ‘nothingness’ yet could also ‘potentially create new possibilities for absent-present-experiments’ (Löytönen et al. 2015:25).

5.7.1 Productively failing with images

Initially at the analysis stage, I began to experiment with the visual images of stone-human intra-actions. Although witness to this playful, lively engagement that was full of movement I realised how static the photograph (figure 24) made the encounter look. I hoped that collages might make the experience come to life in the absence of video recordings. Although interested in more-than-human/human relations my gaze in figure 27 is persistently drawn to the individual geographer.

Figure 27: Photograph of a stone-human assemblage

I saw Tim as the subject of the photograph balancing on some stones. As Hultman and Lenz Taguchi (2010:525) found in initial analysis of children within their photographs, the human seemed to have a ’magnetic power over our gazes’. This reading of the image in figure 27 relied on a subject/object divide – the suggestion was that the human participant was given more value and was seen as more superior than

the stones, the hedge, the house etc. As a subject the fieldwork participant was acting out his intentions and competencies. My default position was to return to familiar anthropocentric 'habits of seeing' which placed the human as the 'centre of attention' (Hultman and Lenz Taguchi, 2010:525-526). This western foundational view of the world assumed 'a strict distinction and hierarchical relationship between viewer and viewed' (Colebrook,2002,161-162). Within this representational view, the human was active, and the stone appears inactive within the photograph providing a passive background for human activity in this case balancing and posing for the camera. It made me think whether Tim was engaging with the stones at all or simply using the objects placed there for his own convenience. In discussing this image with others, they felt the presence of the human caused the magic and reverence of the stones to be lost. This was a separatist view which made a distinction between stone and human.

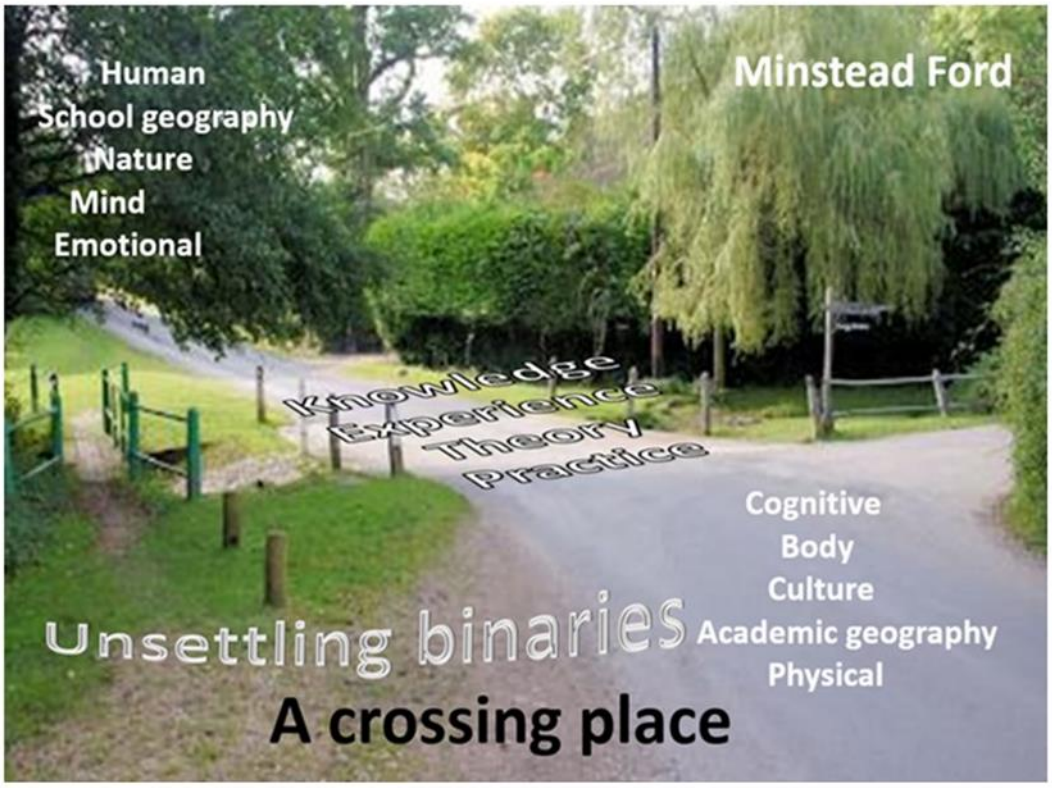
Through my study I wanted to learn to practice 'another kind of seeing: a diffractive way of seeing' (Hultman and Lenz Taguchi, 2010: 5350. I sought to put to work theoretical concepts that opened up possibilities to understand the fieldwork participant as emergent in a relational field (Olsson, 2009:32). In considering posthumanist perspectives, when stone and human met in this playful, embodied, intra-active encounter I considered the human participant and stone as connecting and overlapping in a relational and horizontal field. In reading this image through Barad's notions of intra-activity I can think of the stone and Tim as doing something to each other simultaneously. Within this stone/human intra-action Tim was transformed into a swimmer of front crawl (digital file 3). What is particularly interesting here is what happened to the expression and experience of the stone – the stone-iness within this encounter. The stone's stable rigid structure and appearance were transformed into a fluid, dynamic watery environment within this intra-active space. Hultman & Lenz

Taguchi (2010: 530) stated that within intra-action ‘new problems to be solved emerge as an effect of their mutual engagement’. Within this scenario Tim and the stone could be understood as trying to make themselves understood to each other as they engage in active and ongoing relationship forming (Hultman & Lenz Taguchi, 2010). In a relational materialist approach, Tim and the stone have no agency on their own. What is understood as agency is a quality that emerges in-between different bodies involved in mutual engagements and relations. I realised that I would need to be vigilant for times when the human positioned themselves as superior, autonomous and intentional within the study.

5.7.2 Productively failing in writing experiments

Very early on within my writing experiments I experienced difficulty. Not knowing where to start amongst the vastness of my data – I started at the beginning at Minstead Ford. The extract can be viewed below in figure 28 This started my writing as a chronological account of the fieldwork. Although the theoretical ideas by Massey had emerged from the Minstead encounter it felt forced; a human construction. Where were the elements of the place in the account? It felt like a false start- a failure. Perhaps this notion of failure is to be expected within posthumanist and new materialist studies as O’ Donnell (2014:263) acknowledges

> ‘failure is inevitable in practices that remain open to the world, through which the ‘unknown’ is allowed breathing space rather than resisted in an endless quest to master, confine and navigate the terrain of the known’.



Our starting point for this rhizomatic journey was Minstead Ford – a place where traditionally a stream may be crossed on foot or in a vehicle. A crossing places. This seemed appropriate for this fieldwork which sought to challenge deeply embedded normative discourses and practices in order to explore the possibilities of crossing boundaries between the human and physical, school and academic geography, more than human and human, knowledge and experience, theory and practice. This idea was inspired by Massey (1999:5) who suggested that stimulating intellectual developments particularly come from 'places where boundaries between disciplines have been constructively breached and new conversations have taken place'. In order to create these spaces for doing things differently, Wolfgang (2013:68) *suggests that boundary crossing requires 'collaboration, reflexivity, and dialogue'… in 'navigating the in-between spaces'.*

Figure 28: Plugging in Minstead Ford

So, this study may at times have been unsuccessful in grappling with posthumanist research practices, but as I wrestled with the data, the ideas, the writing and the collage I kept the notion of productive failure in mind which enabled me to remain hopeful within my study. I am reminded that experimentation within a Deleuzian

framework calls for patience and prudence (Baugh,2010). This thesis is not complete, it is positioned as work unfinished. Within the data-researcher-reader assemblage emergent intra-actions are 'still to come' and to be continued and extended (Koro-Ljungberg, 2016:101), leading to more 'generative and generous' future intra-actions in research. In working with the idea of 'productive failure' I have tried to 'trust in the world, trust that something different will come out of this radical, experimental empiricism which nobody knows' (St Pierre, 2017b:4).

5.8 Folding /Unfolding/Refolding

Entering posthumanist research spaces I also employed the process of folding/unfolding/refolding through the analysis inspired by the work of Holbrook & Pourchier (2014). The idea of the fold seemed a useful way to mobilise ideas and 'disrupt the theory/practice binary by decentring each' (Jackson & Mazzei, 2011:263) and instead showed how they intra-act with each other. The fold originated from Deleuze (1998) and is useful to this study as a way of understanding subjectification. Malins (2004:484) writes that for Deleuze subjectivity:

> 'is a process of folding through which the inside (our subjectivity, mind, and body) and the outside (discourse, knowledge, the spatial environment) become intimately entwined. It is a folding, or a doubling over, whereby the outside is always part of the inside and the inside always part of the outside'.

Folding 'is to diminish, to reduce, to withdraw into the recesses of a world,' while unfolding 'is to increase, to grow' (Deleuze, 1993:9). Within the study writings, practices, place invitations, movements, actions, mappings, photographs, videos, printed excerpts from transcripts and readings provided infinite possibilities within the fold. Folding/unfolding/refolding encouraged me to enter 'in-between spaces' (Holbrook and Pourchier, 2014:759) where we could 'think-practice' (Thiele, 2014: 202)

with the ‘data’. This process proved generative in producing further questions regarding the study rather than making meaning or fixing findings. These spaces enable ideas in formation to ‘lie adjacent to one another, touch one another, or exist in the presence of one another’ within an assemblage (Irwin & Springgay, 2008: xxviii). Folding/unfolding/refolding was a continual process of ‘enveloping-developing, involution-evolution’ (Deleuze:1993: 8). Work in the fold could only ever be ‘transitory’ (Irwin & Springgay,2008: xx). This process led the researcher ‘in different directions’ and kept ‘analysis and knowledge production on the move' (Mazzei, 2014:743).

5.8.1 Thinking with theory

In seeking to ground my study in difference rather than sameness (Mazzei, 2014) I enacted a folding experiment of ‘thinking with theory’. This has been written about by Jackson and Mazzei (2012) who explored Deleuze & Guattari’s ([1988]/2013) notion of ‘plugging in’. Deleuze and Guattari (2013:3) stated ‘when one writes, the only question is which other machine the literary machine can be plugged into, *must* be plugged into in order to work’. I have spent time considering what plugging in may mean for my study. The phrase ‘plugging in’ suggests a joining together, being connected to, feeling an affinity with. I brought my data into direct relation with theories/literature/concepts I have been working with. The etymology of the phrase ‘plugging in’ appears to have originated in 1620’s in Holland; the Dutch word ‘pluggen’ means ‘to work energetically’. Analysis becomes active, lively moments ‘of reading-the-data-while-thinking-the-theory, of entering the assemblage, of making new connectives’ (Mazzei, 2014:743). My assemblages are an ongoing, collective exchange with a multitude of voices, rather than from one or two significant authors. The authors cited are not intended to be isolated but are all working together within the data-research assemblage.

I have sought to heed the warnings of Jackson & Mazzei (2012:5) who have suggested researchers need to be careful to locate theory and data. In placing a range of texts from transdisciplinary fields in a different kind of relationship 'they constitute one another and in doing so create something new' (Mazzei, 2014:743). As St Pierre (2017b:3) pointed out 'if one has read and read, one cannot not put theory to work—it will happen'. This positioned the literature as a 'productive provocation' situating the theorists as opening up thought rather than foreclosing it (Jackson & Mazzei, 2012:5). It was hoped that setting theoretical concepts to work in this way generated new insights that could transform the way that geographical education encourages learners to look, experience, think and be with the world. By plugging in my writing to theory it was hoped I would avoid my study being a representation of the fieldwork space for 'writing has nothing to do with the signifying. It has to do with surveying, mapping, even realms that are yet to come' (Deleuze & Guattari, [1988]/ 2013:3).

Chapter 6 ~~Findings~~ New Forest Fieldwork Assemblages

'Many voices speak here in the interstices, a cacophony of always already reiteratively intra-acting stories. These are entangled tales. Each is diffractively threaded through and enfolded in the other.'

(Barad, 2012: 1)

Within this chapter I share an assemblage of relational stories, poems and collages from our New Forest fieldwork weekend in the hope of creating a focused and contextually rich narrative of our experiences. They were drawn from a plethora of experiences and research artefacts that emerged from ideas of place invitations as illustrated within the collage – Thinking with New Forest invitations (figure 29).

Through diverse stories I have undertaken what Dahlberg and Moss (in Davies,2014: ix) call the 'challenging work of putting philosophical concepts into practice making them lively'. This work does not set out to create empirical claims about the geographical fieldwork undertaken that weekend or to provide definitive answers about creating spaces for doing fieldwork in geographical education differently. Rather in the following sections I have attended to the detailed fieldwork processes by tracing the fleeting assemblages that are formed in co-existing multiplicities through intra-active relations. The insights I have shared can only partially reveal the complexity and intricacies of more-than-human/human relations within this event as the fieldwork spaces encountered were emergent assemblages in constant formation.

Figure 29: Thinking with New Forest Invitations: a collage

Figure 30 is a found poem emerging from excerpts of graffiti boards and audio recordings that acknowledged the wiggly path of learning as 'an entangled process that occurred spatially, temporally and simultaneously. It was difficult to share this entanglement, much less untangle the elements in the making' (Youngblood Jackson, 2018: 105). A wiggly path to learning with relational pedagogies seemed appropriate for our experiment. As Griffiths (2006:66) reminds us 'all things that represent life at its most vital and wild wiggle. Words wiggle into metaphor; sperm wiggles; dancing and jokes wiggle; the shape and character of tumultuous life is a wiggling one'.

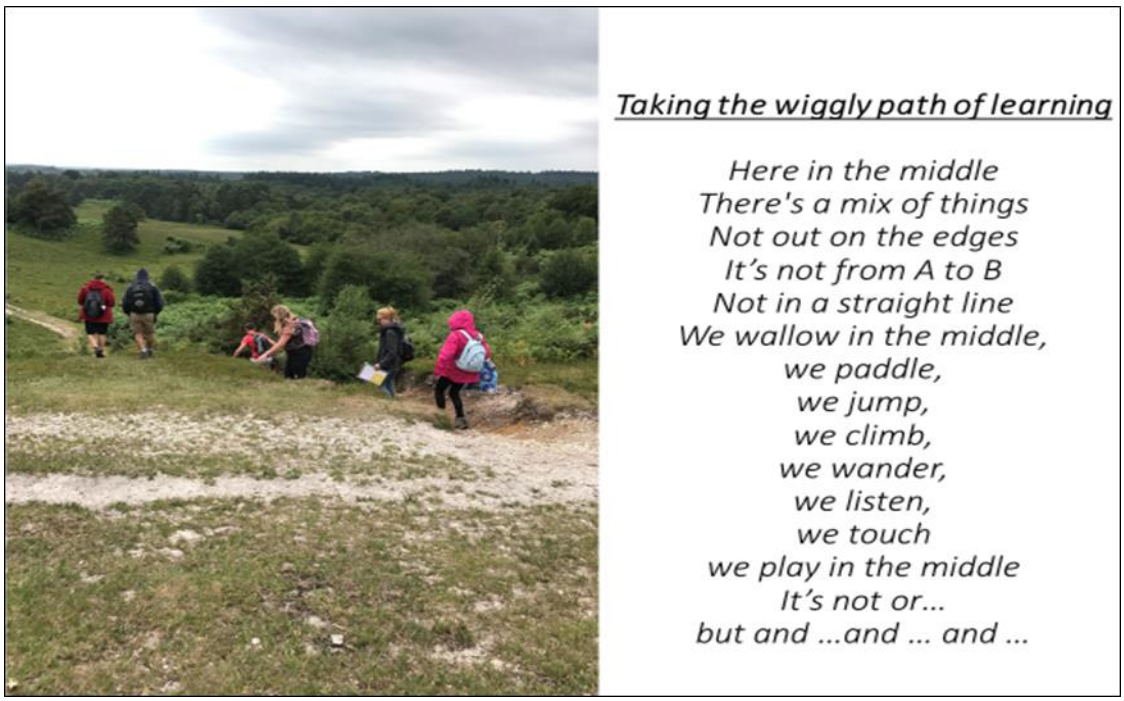


Figure 30: Taking the wiggly path of learning

6.1 An invitation to enjoy

The collage (figure 31) shares spirited encounters between more-than-human/human participants. Some of these encounters are with natural objects e.g. an upturned tree, whereas others are with man-made features e.g. telephone box and a stone circle.

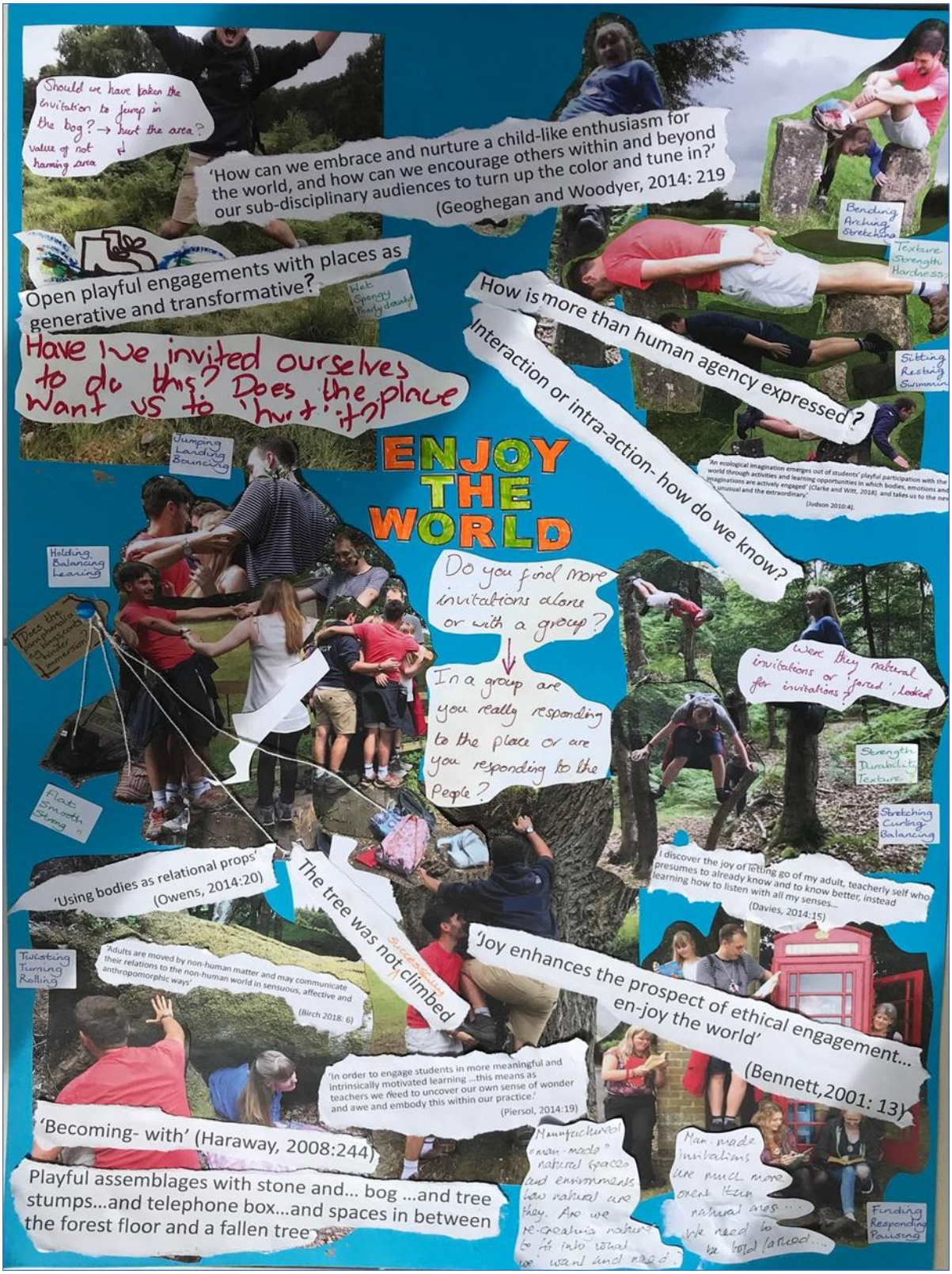


Figure 31: Enjoy the world: a collage

These intra-actions seemed to reveal an openness to 'joyful, childlike encounters' with the world - climbing, balancing, playing. Materiality was at the centre of their engagements. It may seem strange to see adult participants playing, immersing themselves with places, feeling free to engage more cheerfully with the world (Woodyer & Geoghegan, 2013). This freedom to be lively within fieldwork spaces seems to be significant. From a posthumanist view, some of these actions may look like the humans are treating material elements of place with disrespect, or simply using them as objects for their convenience, thereby occupying a masterly role of domination over the environment.

From a fieldwork-as-usual perspective some of these situations may look like health and safety nightmares requiring human intervention. From within this complex data-researcher assemblage I would like to suggest another view. The participants seemed to come into playful, joyful relations with the world. This illustrated the educators' willingness, at times, to 'be more open to spontaneous and, sometimes, surprising occurrences, by relinquishing 'the control and self-domesticating forces that are engrained in our pedagogical thinking and practices' (Jickling, Blenkinsopp, Timmerman & Sitka-Sage et al., 2018:85). Davies (2014:15) suggested the need to 'let go' of the 'adult teacherly self' that is the one 'who presumes to already know and to know better, instead learning how to listen with all [your] senses…' In these playful encounters the participants seemed to be learning to appreciate stone, wood, trees, telephone box through movement. It is difficult to know if they were performing interactions or intra-actions with the places. Sometimes the photographs make the performances look very staged, but from within the data-researcher assemblage, the playful intra-actions felt spontaneous and intuitive.

The intra-actions seemed to have emerged from an encounter where each participant affects and is open to being affected by the other (Barad, 2007). It is unusual to see adults reacting in this way, but I feel it is important to acknowledge that 'excitement for the world is not restricted to the young' (Geoghegan & Woodyer, 2014:219). Perhaps some of these participants were drawing on prior experience of playful place engagements. It seems as geography educators if we seek to move towards more enchanting, relational encounters with the more-than-human we need to embrace our inner child, create freedom within fieldwork spaces and embody play within our own practices. Bennett (2001:13) reminds us that 'joy enhances the prospect of ethical engagement with the world' and calls for humans to … 'en-joy the world.'

6.2 An invitation into a place assemblage

Relational fieldwork emerges within place assemblages where more-than-human/ human meet through intra-actions.

Geographers encountered travelling with the notion of place invitations. The verbs below (figures 32-34) considered the multitude of ways geographers engaged with Minstead Ford:

Figure 32: Intra-actions within a ford-geographer assemblage 1

Figure 33: Intra-actions within a ford-geographer assemblage 2

Figure 34: Intra-actions within a ford-geographer assemblage 3

This was a record of complex ways the ford, stream and geographers engaged. This shared some of the actions that emerged and were enacted in the meeting of ford-stream-geographer. Encounters that were not pre-determined, outcomes unforeseen and serendipitous. There was a tension between wanting to provide a contextually rich narrative and seeking to avoid a descriptive account. With my first narrative account I productively failed (see 5.7.2 figure 28). Now I disrupted this description with poetic writing in figure 35 – a found poem from fieldnotes and conversations.

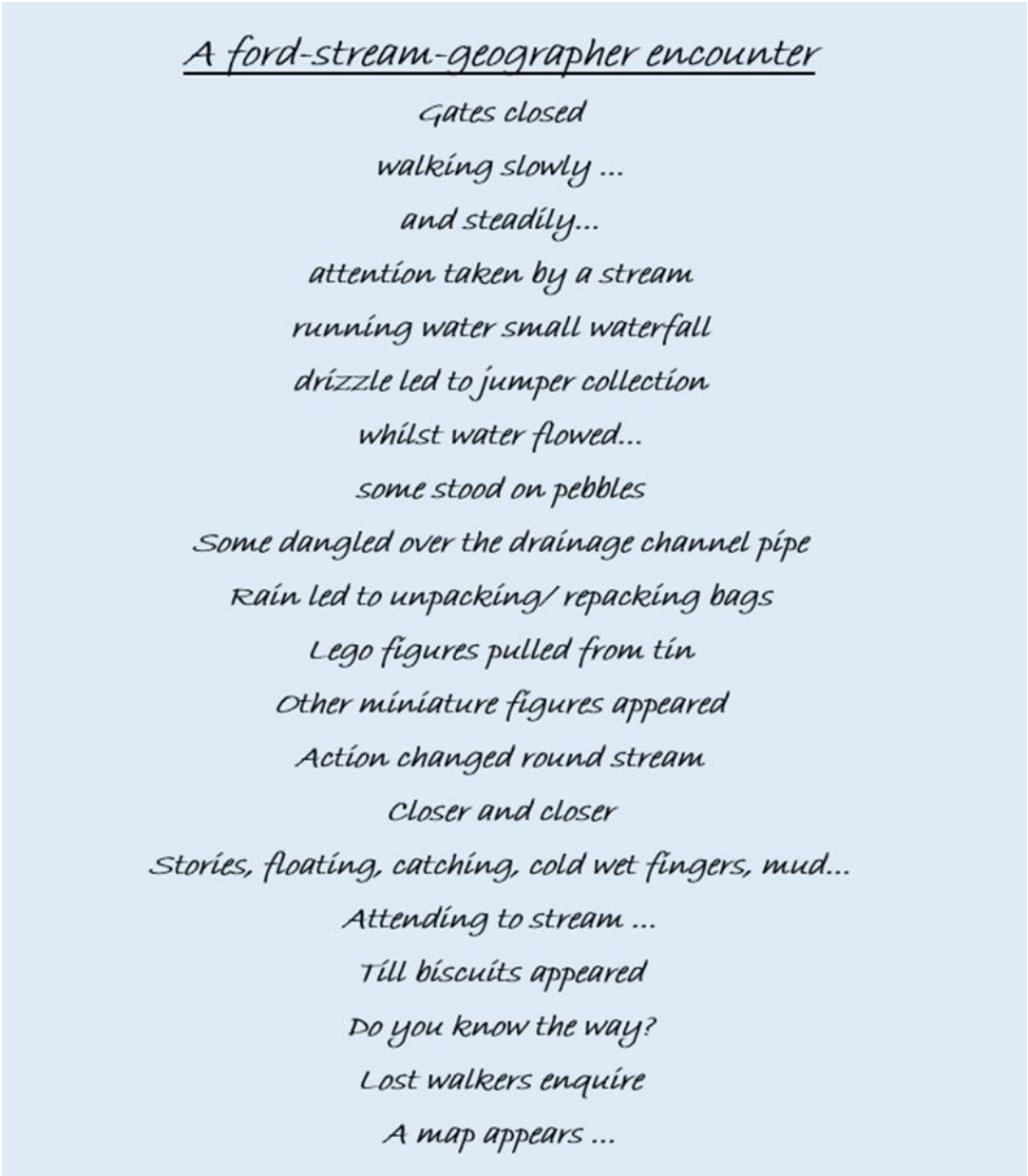


Figure 35: A ford-stream-geographer encounter: poetic writing

The poetic writing highlighted the importance of the more-than-human within the fieldwork space: gates, drizzle, water, Lego figures, biscuits, map all played a key role in the way that the geographers engaged with the place. It positioned the fieldwork site as an assemblage. Bennett (2010: xvii) suggested an assemblage is like 'a human-non-human working group.' The stream-ford space was a 'contingent tableau' (Bennett, 2010: 5); a place of water, concrete, geographers, trees, asphalt, grasses, wood, soil, stones, drizzle and other things. Within this tableau 'matter, both more-

than-human and human, becomes vibrant' (Jackson and Mazzei, 2016:95). The fieldwork space was a 'material cluster of lively parts' (Bennett, 2010:24) that created new things together in their movements (Gannon, 2016). This foregrounded the notion of assemblage as ongoing processes of co-construction across and through different human and non-human players (Kennedy et al. 2013). Thinking of the elements of place as an agentic assemblage enables the data-research experiment 'to shift from human (i.e. contextual experience of objects) to the vibrant matter animating an agential assemblage' (Jackson & Mazzei, 2016:95). So, the fieldwork space became an agential assemblage that was present as 'a field of forces or a territory with porous boundaries and multiple presences' (Duhn, 2012:102). Within this territory I sought to pay close attention to the flows, intensities, events and movements that give the fieldwork space its qualities and properties.

The stream-ford-geographer assemblage in figure 36 was just one of many lively place-geographer assemblages that emerged over the fieldwork weekend.

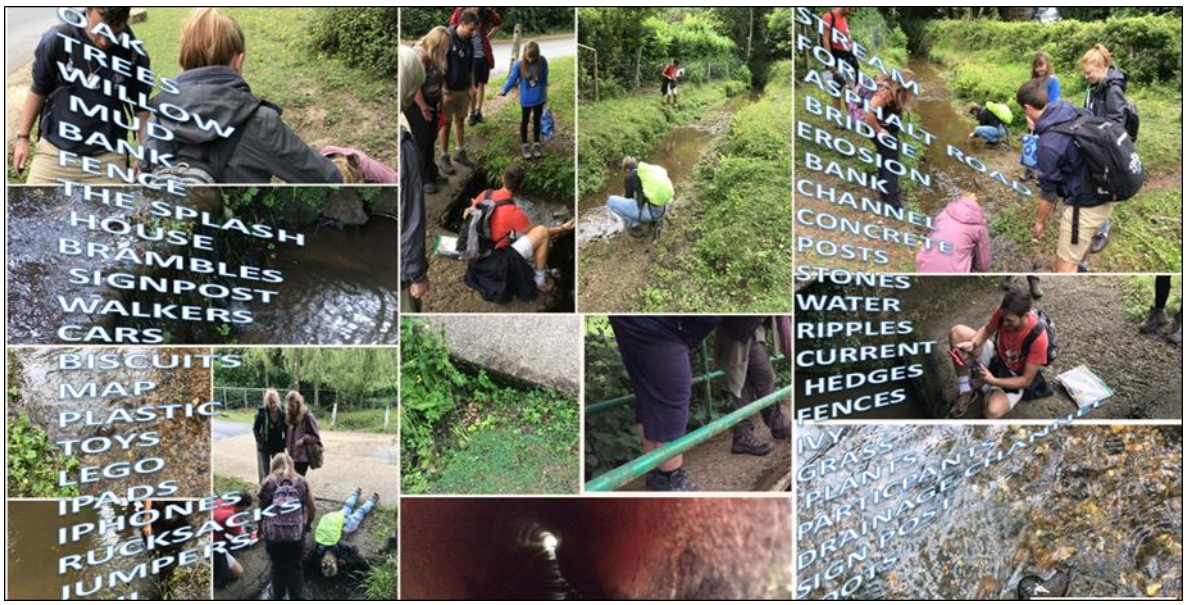


Figure 36: Elements within a ford-stream-geographer assemblage

For this place-geographer assemblage I shared the location and described some elements of the assemblage. This list may or may not be helpful, but I wished to share

the bodies, things, materials, voices and technologies that were drawn together at that particular moment in space and time. However, I realised that this could be interpreted by the reader as 'an essentialist account of the internal characteristics of an assemblage' rather than acknowledging 'the autonomy of the parts and the exteriority of relations' that might emerge (Anderson et al. 2012:38). The posthumanist analysis was thwarted with difficulties. Gannon (2016:133) explained that there is an inherent tension in the notion of trying to 'capture' an assemblage in the Deleuzian sense as they resist interpretation. As we travelled, we paid attention and attuned to the material and more-than-human elements which offered the geographers a variety of invitations for engagement. The photograph below (figure 37) could be a group of geographers who have undertaken a stream study.

Figure 37: Looking at a stream

It raised the question what made this a posthumanist/new materialist fieldwork experience? Traditionally, geographers frequently encounter water as part of fieldwork. In traditional fieldwork, the stream/river is viewed as an object of study to be observed,

measured and recorded in order to know, explain and understand the stream's behaviour. Many parts of the stream are placed under the scrutiny of geographers who within enquiries measure velocity, flow, the length and width of the channels and the gradient. They study and compare the sizes of the bedrock and assess risk; they put control measures in place to ensure a safe visit. Water is often positioned as problematic causing challenges to human. Water is there to be controlled and managed e.g. flooding and river management strategies. This human-centred fieldwork is limited, positing the river or stream as 'other'; a backdrop scene against which to act.

By entering a ford-water-geographer assemblage we sought to add a new dimension to knowing streams by placing the geographers in relation to the world rather than outside it. This perspective required a shift in our geographical thinking from asking what we can know about the world to consider what the water knows, how we might learn with the stream-ford environment and what the water is inviting us to do.

6.3 An invitation to linger

Relational fieldwork is contingent, fluid and improvised in the moment.

Participants began to attend to the water by pausing and taking their time with the stream. They noticed what the water did – how it moved, how it felt to touch, what it sounded like, how it affected the participants when they attended to it. The continuous movement of the water drew attention to the possibilities for watchfulness – watching the patterns of the eddies playing on the surface of the water – an appreciation of the changeable and moveable nature of the stream. Figures 38-43 below shares a 'sensory jumble' (Gallagher & Prior, 2017:1256) of sights, sounds, movements and textures in our encounters with the stream.

Paddling (digital file 4)

Figure 38: Paddling

Feeling the water between our toes

(digital file 5)

Figure 39: Feeling the water between our toes

Looking closely – follow the stick…

(digital file 6)

Figure 40: Looking closely – follow the stick

Noticing patterns
(digital file 7)

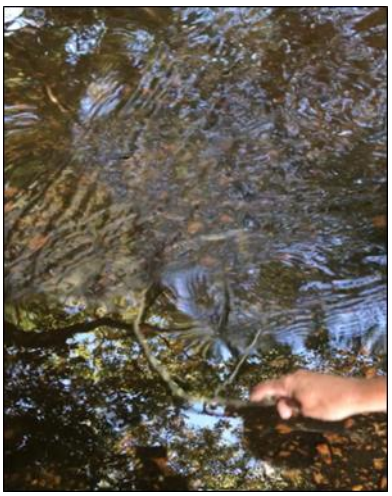


Figure 41: Noticing Patterns

Playing with pebbles
(digital file 8)

Figure 42: Playing with pebbles

Watching bracken floating along the stream

(digital file 9)

Figure 43: Watching bracken floating along the stream

The water was viewed as alive and vibrant (Bennett, 2010) and possessing affective and agential qualities (Jackson & Mazzei, 2016:96). The stream had the capacity to affect the geographers as well as be affected by them. The fieldwork space was positioned not as an assemblage of passive objects to be known and studied, but as a space where the more-than-human have 'thing-power' (Bennett, 2010). Bennett (2010:6) describes 'thing-power: as the curious ability of inanimate things to animate, to act, to produce effects dramatic and subtle.' By acknowledging our engagement with water, I hope to enhance receptivity to the 'thingness' of the water by drawing attention to our intra-actions by the stream. Bennett (2004:349) described 'thing-power as a speculative onto-story, a rather presumptuous attempt to depict the nonhumanity that flows around but also through humans.' She acknowledged that not everyone would appreciate this 'naïve realism' approach, for many materials were either too alien or too close for some people to appreciate (Bennett, 2004:349).

So, our travels provided a geographical experience that was more than exploring, measuring the flow, naming the parts of the stream. It was about being attentive by engaging participants' senses to the liveliness of the stream and in doing so 'foster greater recognition of the agential powers of natural and artifactual things' (Bennett,

2004:349). From this intense intra-activity ‘what if?’ questions emerged (see figure 44 below).

Our intra-actions in this ford-geographer assemblage were ‘an unplanned coming-together of diverse and affective elements’ (Duhn, 2012:102) with this particular place in this specific moment. An improvisation tailored to the singularity of the fieldwork event. De Landa (2011:185) reinforces this point by suggesting that ‘every actual assemblage is an individual singularity’. This is a ‘radically particularist’ approach attending to the singularity of compositions that are formed through the particular, but non-essential, capacities of component parts’ (Anderson et al. 2012: 36) hoping to avoid notions of ‘universal potentiality’.

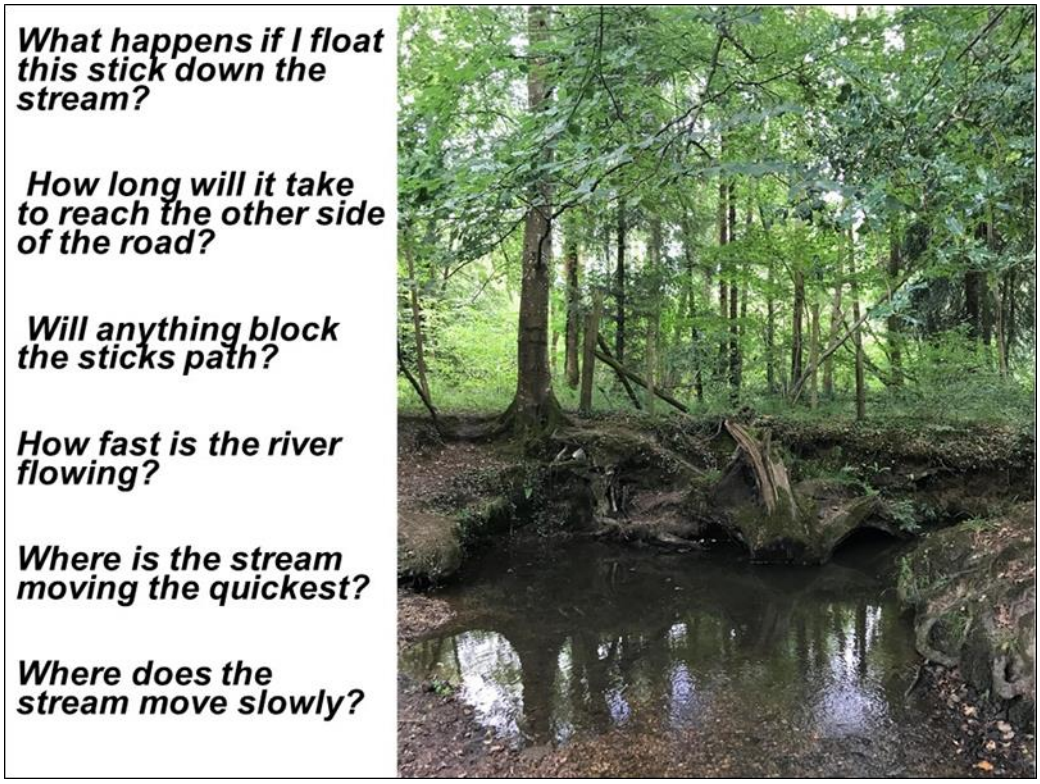
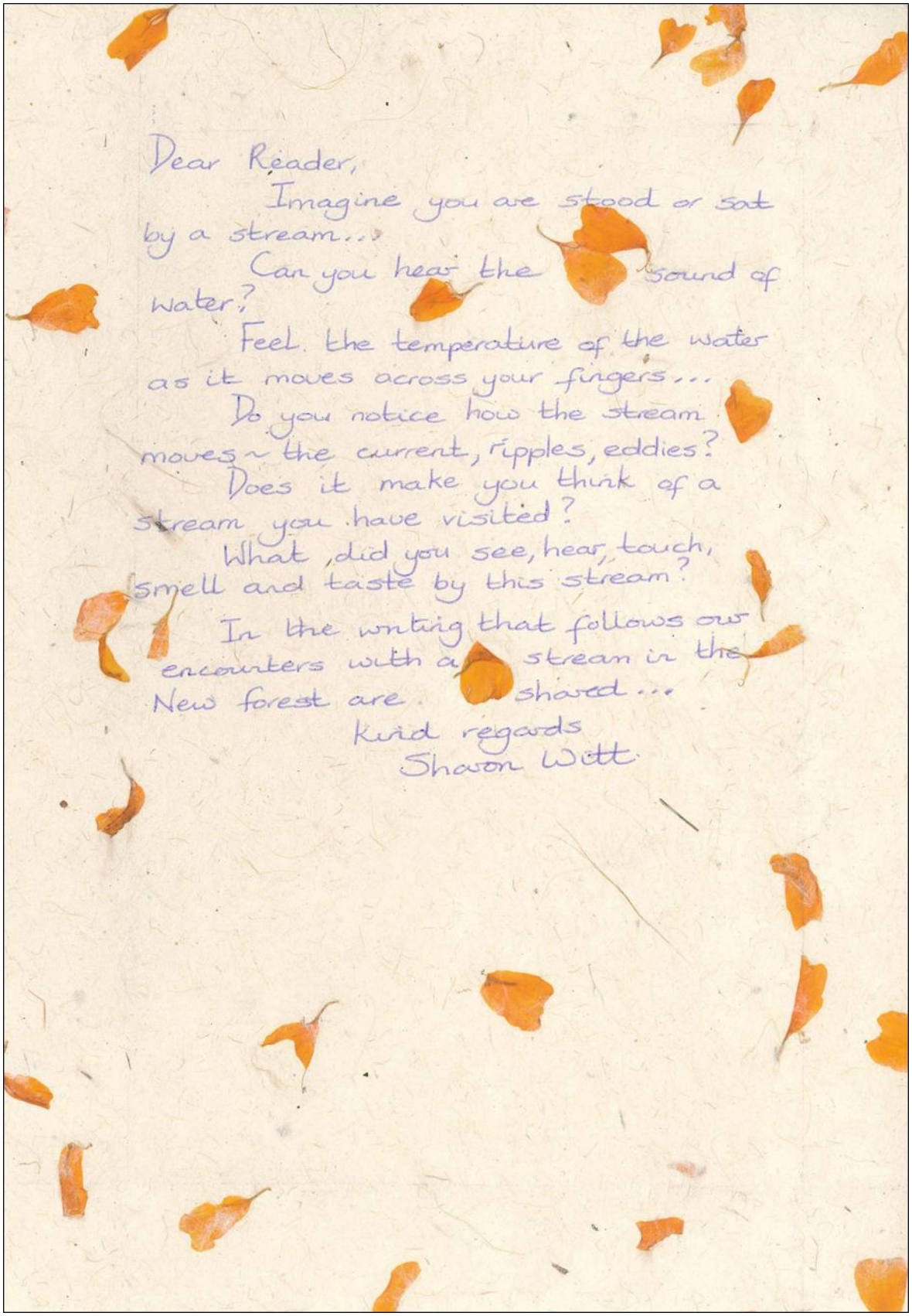


Figure 44: ‘What if’ questions emerged


Dear Reader,

Imagine you are stood or sat by a stream...

Can you hear the sound of water?

Feel the temperature of the water as it moves across your fingers...

Do you notice how the stream moves ~ the current, ripples, eddies?

Does it make you think of a stream you have visited?

What did you see, hear, touch, smell and taste by this stream?

In the writing that follows our encounters with a stream in the New forest are shared...

Kind regards

Sharon Witt

6.4 An invitation to listen

Relational fieldwork requires us to resist habitual practices and open ourselves to the other through sensory attunement and attention to spaces of difference.

To be immersed within the world Davies (2014:20) suggests we are 'constantly crossing thresholds, entering new doors, learning new languages.' This need to keep moving, to keep attuning and attending to a world of difference is the excitement and exhilaration offered by posthumanist research possibilities. We ventured out into the relational heterogeneous community in the making – waiting for us in the New Forest not knowing what to expect or who we might meet. Digital files 10-13 below invite the reader to enter the stream-research assemblage:

We listened to the call of a small waterfall … (digital file 10)

We paddled with the stream… (digital file 11)

We touched the water … (digital file 12)

We paid attention to the movement of the water … (digital file 13)

This found poem (figure 45) emerged from fieldnotes and conversations:

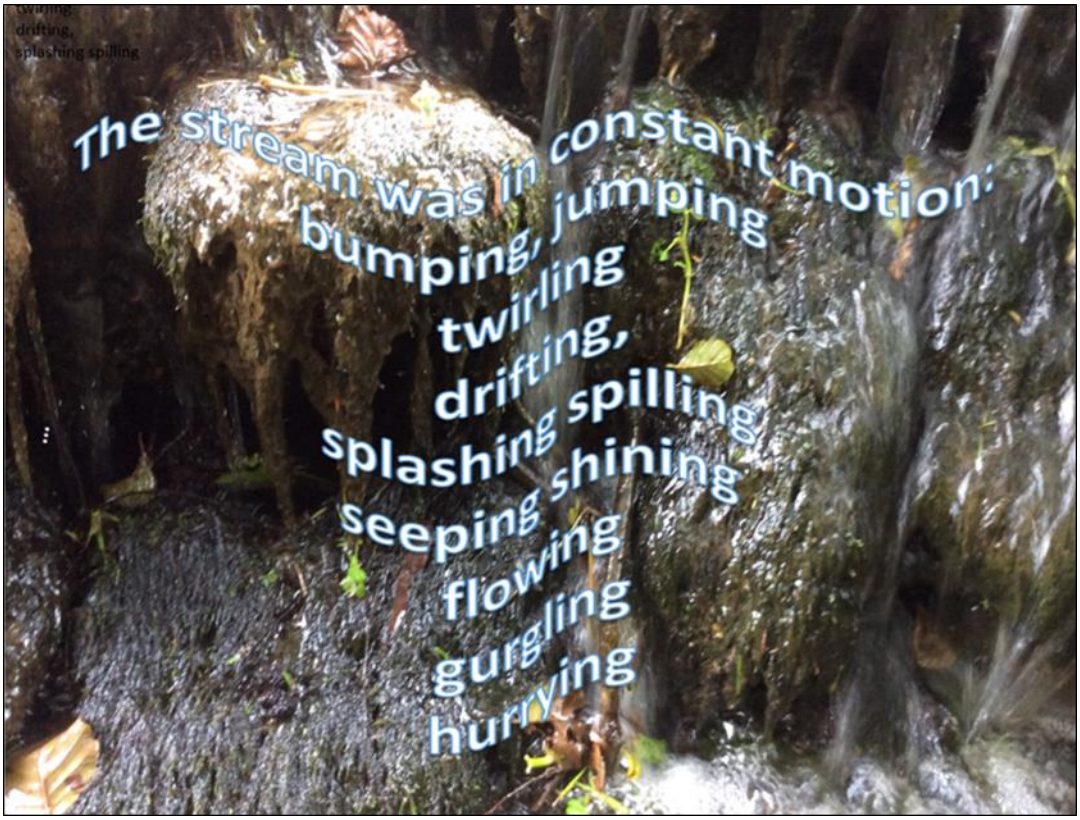


Figure 45: The stream was in constant motion… a found poem

The poetic exchange in figure 46 shared the moment two human participants are invited by the sound of the water to come into relation with the stream revealing the importance of participants' active open attentiveness to the world's emergent listening opportunities. Davies (2014:1) writes:

> 'Listening is about being open to being affected. It's about being open to difference and in particular, to difference in all its multiplicity as it emerges in each moment in between oneself and another. Listening is about not being bounded by what you already know. It is life as movement'.

Wow listen to that?

What? What are you listening to?
Can't you hear that?
Can't you hear the stream.
The invitation of water

Moves closer
What's it saying?
Be quiet
Crouching by the stream
Engaging sound invited us in

Still and together
They listened to the water …

Figure 46: Wow listen to that! A found poem

This found poem from overheard conversations and fieldnotes shared the story of geographers entering a relationship with the stream through opening themselves up to the sounds of the stream. This experience was also shared on the emergent map (figure 47).

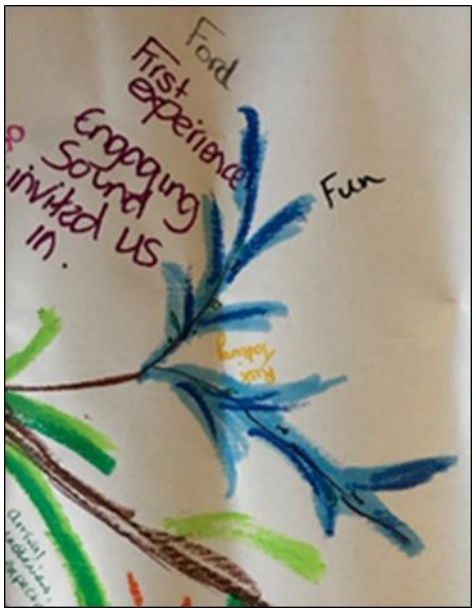


Figure 47: Sound invited us in

This was a risky stream-geographer encounter where participants stepped into the unknown and engaged with the possibility of listening without 'knowing the meaning' (Davies,2014:19). Careful and sustained practices of listening can open spaces for responding to the more-than-human and help pay attention to 'the voices of the silenced' (Blenkinsopp,2017:351). Listening with the stream encouraged fieldwork participants to 'enter into an ethical relationship based on respect for difference and Other' (Dahlberg & Moss in Davies, 2014: xi). I fold into my thinking and experience ideas from Bronwyn Davies (2014) whose work is rooted in possibilities for being and becoming. Her work focused on listening with children yet has much of relevance to listening to a more-than-human world.

Davies (2014:21) warned us that building relationships requires a kind of 'emergent listening'. This was very different from 'listening-as-usual which Davies (2014:25) described as repetitive, 'not requiring any thought, and serving to reiterate that which is already known'. Gallagher et al. (2017:1246) also called for an expanded listening in education for 'learners to hear how sound propagates affects, generates atmospheres, shapes environments and enacts power'.

Considering listening within fieldwork practices was not new and has been a well-established activity within sensory activities where geographers often listen, identify, categorise and map sounds to provide auditory archives of fieldwork spaces. These listening practices are often used to judge environmental quality placing the humans in a dominant position. Emergent listening moves participants towards more equal relationships with more-than-human elements as the world is sensed 'as multi-vocal, important, diverse, and deserving of respect (Blenkinsopp,2017:363). Rinaldi (2006: 65) reminded us that 'emergent listening requires suspension of our judgements and above all our prejudices'. It is not an easy thing to work against your habitual practices

and ‘open yourself to others’ (Rinaldi, 2006:114). In the stream-geographer assemblage participants entered into ‘fluid congregations’ (Strang, 2005:108) with the stream. They let go of their usual listening practices and listen in silence becoming fully immersed and transformed within the encounter. They risked listening and as a result they acquired new knowledge and new relations with each other, the water, bank and channel. Davies (2014) suggested that there is always creative tension between listening-as-usual and emergent listening as this openness to the new is hard to sustain. Davies (2014:24) explains:

> ‘emergent listening is always in tension with a tendency to make things solid, to classify them, to territorialise them. We continually attempt to fix the unfixable in place. We incorporate the new and unexpected movement into the already known, we regulate it in the hope of holding and repeating it’.

Blenkinsopp, Affifi, Piersol, De Danann Sitka-Sage (2017:363) urged educators to be proactive in adopting practices to nurture listening to ‘other voices’ within the natural world; it is not simply a matter of ‘shutting up and listening’. They suggested vigilantly challenging ‘habits of thought, affect, language and technological mediation that prevent other interlocutors from communicating or prevent our capacity to be open to such address’ (Blenkinsopp et al. 2017:363). Within my study some participants used technology to collect sonic data shared in figure 48 below:

Listening with woodland leaves Digital file 14	Listening with Study Centre Chickens Digital file 15	Listening with local birds Digital File 16
Boots/mud assemblage Digital File 17	Car/ford assemblage Digital File 18	Listening with bees Digital File 19

Figure 48: Examples of sonic data fragments collected during fieldwork

These digital files (14-19) provide an acoustic sense of the fieldwork. After reading Blenkinsopp et al. (2017) it made me wonder if the presence of technology was a barrier to a relational orientation with the world. It was interesting to note that after day one several participants commented that they would travel without their iPads the next day as they felt it hampered their engagement with the world. For geography educators there seems to be a sensitive role to create a space of freedom where the more-than-human/human can come into relation. A space where emergent listening may emerge in a spirit of openness and willingness to experiment with new ways of acting and being. I am not sure we always managed to move away from listening-as-usual; this is tricky work.

Attention to the sounds of the place seemed to inspire some poetic responses amongst participants (Figures 49-50):

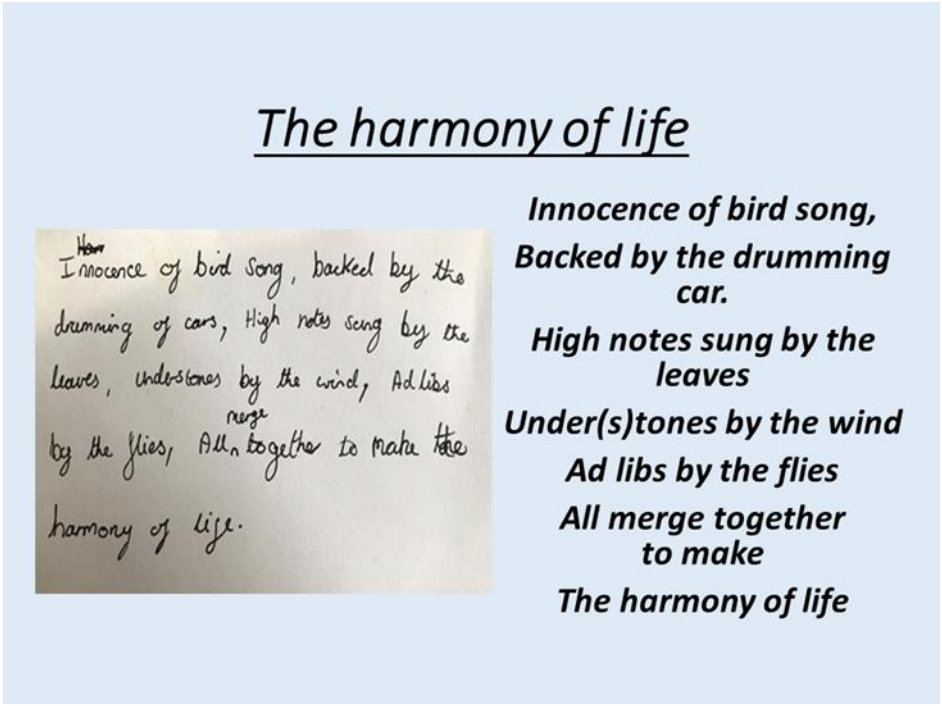


Figure 49: The harmony of life- a participant poem.

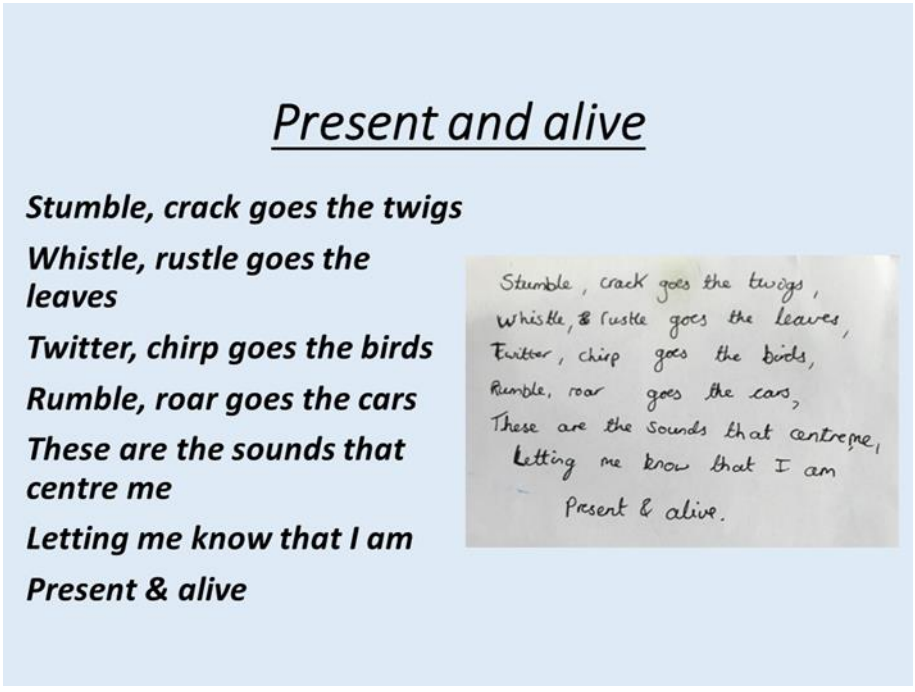


Figure 50: Present and alive- a participant poem.

For at least one participant, sound seemed to be significant to their fieldwork experience (figure 51 below):

> *'Thinking about the elements that invited a reconnection, for me, part of it was to do with the sounds and how they were so different to what I hear at home, which is usually cars, computers, TVs etc. The sounds are a lot more urban, whereas at Minstead, we usually heard more natural sounds, like the wind, trees or branches blowing in the wind, animals etc. I remember when I got home from Minstead I sat there listening to this almost unnatural buzzing sound as I reacclimatised to being back home…'*

Figure 51: Extract from Beth's blog entry

As we enter new encounters with others we are brought to a 'threshold, a door, a becoming between two multiplicities' (Deleuze & Guattari, [1988]/2013:291). This is an ethical relationship where listening is 'continual openness to the not-yet-known' (Davies,2014:32).

6.5 An invitation to play

Within fieldwork spaces the more-than-human and human have the capacity of agency and co-construct encounters that can transform thinking.

The ford-stream-geographer assemblages changed and were continuously in formation. Anderson & Harrison (2010:15) referred to 'events that may break, interrupt or change relations, and may initiate the chance of new relations.' One such 'event' was the introduction of miniature figures previously selected by participants to join the fieldwork. The miniature figures, some plastic, some Lego characters and some homemade with pipe cleaners and beads, emerged from pockets and rucksacks and became new actors that brought forth playful exchanges. Anderson et al. (2012:181) suggested that this kind of change within the 'arrangement and interaction of parts' within assemblages offers the 'potential to reconfigure an assemblage as new alliances are forged'. It was important to acknowledge that the miniature people did not act

alone, but in collaboration with other elements within the assemblage as part of a collective, animated lively entanglement or a ‘non-totalizable sum’ (Bennett, 2010:24). Perhaps it is helpful to consider ‘there is less an assemblage of agents than there is an entangled state of agencies’ (Barad,2007:25).

Through playing with these miniature folks within the stream landscape the geographers were immersed directly with the intricacy of the physical world - noticing, watching, touching, listening, placing, engaging, wondering. Working at a different scale - taking a miniature view, seemed to focus participants’ attentions in playful sensory and embodied exchanges (figure 52).

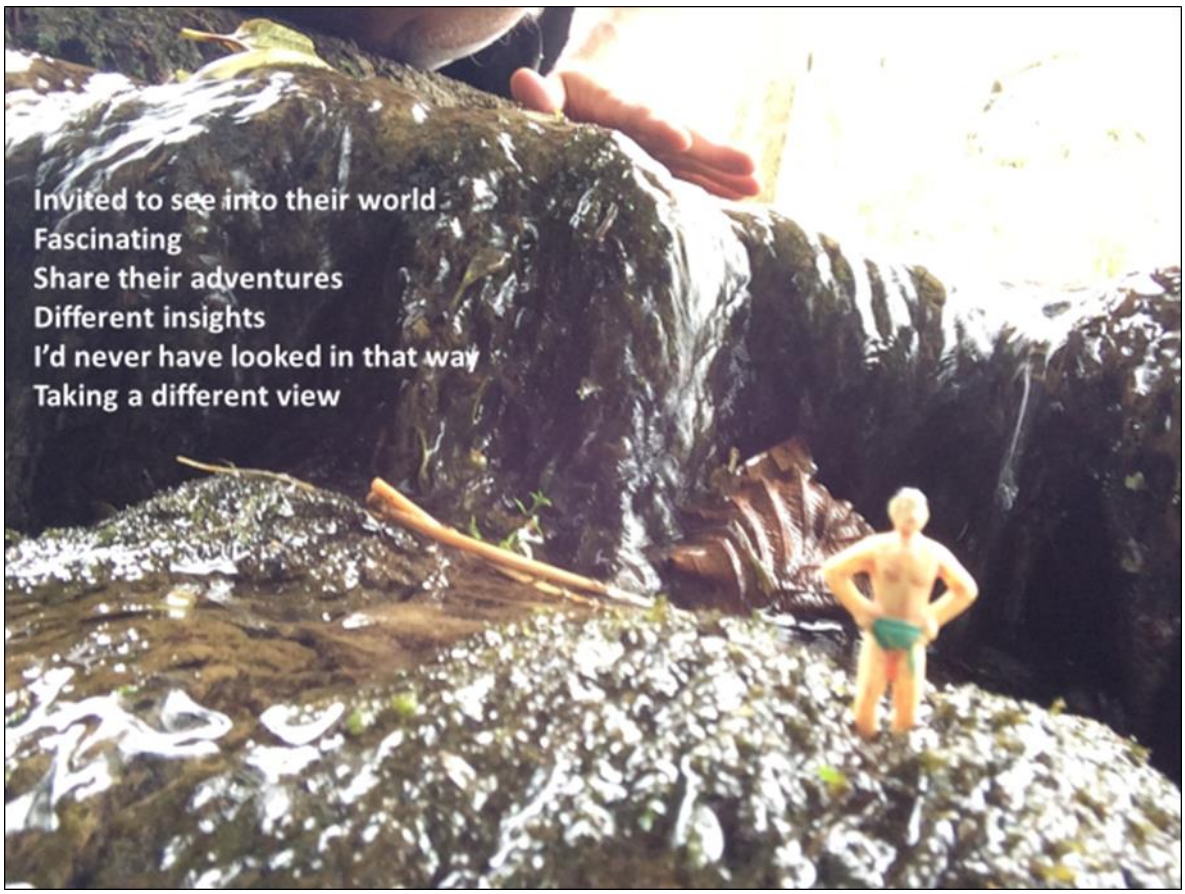


Figure 52: Found poem from Samuel’s graffiti board contribution

Within a posthumanist/new materialist framework the figures had the capacity for intra-active agency in their own right rather than something merely to be played with.

The miniature figures were vibrant or actants (Bennett, 2010) inviting the geographers to act in certain ways. From these lively encounters within the miniature-toy-stream-geographer assemblage multiple actors mutually co-produced stories of watery adventures. In terms of Bennett's theoretical understanding of an object as actant our miniature figures and participants could be viewed as 'equally malleable, playing together and co-constructing encounters' (Thiel, 2015:115). The miniature figures became enfolded into the geographers' activities and stories that were created around the stream location (figure 53).

Figure 53: Playful data presentation of emergent stories

Their presence resulted in an entanglement of figures and humans which created 'a space where both are vital to the production of the something created' (Thiel,

2015:115). In this way place knowledge of the stream and ford were co-constructed through the creation of live action texts (Lenters, 2016).

Travelling with miniature characters is an example of a small intervention or provocation within a space (Taylor, 2017b). The presence of the miniature figures within the assemblage changed the dynamic of the activity encouraging playfulness and improvisation tailored to the singularity of a fieldwork event. The miniature figures became vibrant and invited the geographers to imaginatively engage with the place as they playfully considered scale, story, different perspectives and noticing carefully. This supported new, joyful ways of understanding this particular fieldwork space.

Disrupting the human gaze and exploring the materials and elements of the site through a small world view, provided what Bachelard (1994:155) referred to as 'a liberation from all obligations, a liberation that is a special characteristic of the activity of the imagination'. The imaginative dimension invited the participants to encounter 'the world through another experience thereby supporting new ways of understanding [their] position in the world' (Judson,2010:67). Many children may feel constrained and controlled by their current fieldwork experiences. They tend to be teacher dominated with close supervision for fear of risk and little room for freedom or choice; an opportunity for knowledge gains or directed skills practice (Kinder,2018). In many cases geography outside the classroom has a tendency to domesticate the fieldwork space. As Jickling (2018:x) explains 'domestication means managing the life right out of it – taming it, restraining it, confining it controlling it.' Perhaps this is happening to the learners too and as a result fieldwork is not always the positive, memorable experience for some children that geography educators often claim. Relational, playful pedagogies offer children the chance to play, to create alternative worlds, the freedom to explore and follow their own interests within the world. This type of approach to

geographical fieldwork does not require the learners to copy and reproduce existing knowledge which has been explained by an expert guide of the place. Instead it encourages participants to embark on genuine fieldwork of discovery to bring something into the world that is new and their own unique response (Biesta, 2010a).

The miniature figures invited possibilities for what Macfarlane (2015:325) referred to as a 'kind of fantastic travelling, in which worlds slip easily around each other, where there are soft boundaries between what is real and what is remembered, and each place in front of us is somewhere else too'. MacFarlane (2015) suggests that children inhabit these multiple worlds easily. This shifting of focus to a minute scale drew attention to the fine detail and materiality of the location. As a result of the stream-geographer-miniaturetoy assemblage participants began to notice the colour of the water, the patterns made on the surface of the stream, the temperature etc.

The challenge of decentring the human was ever present. It was present in the miniature toy assemblage as the figures were representations of humans and given human names and characteristics. This realisation emerged as I was looking through the photograph data. I was surprised I had not noticed before as I regularly used this activity within my teaching practice.

6.7 An invitation to story

A particular moment that glowed (Maclure 2015) was an event that saw a Lego character journey down the stream, through the drainage channel, to be collected by a fieldwork participant. A photograph compilation slideshow showing the sensory, embodied and affective experience of the miniaturefigure-stream-geographer assemblage (digital file 20) was created. On successfully catching the Lego character the participant is visibly animated and delighted to have been reunited and the affect on others can be seen in figure 54. This Lego/human entanglement might be described

by Thiel (2014: i) as ‘a moment of muchness’; an ‘intellectual fullness that manifests through a compulsion to be engaged in an activity that one has a particular affinity for or curiosity about.’

Figure 54: The joy of a Lego adventure

The miniature figure and geographers were crucial elements within this storied, embodied and emotional encounter where thing-power, ‘a not-quite-human force . . . addl(es) and alter(s) human and other bodies’ (Bennett, 2010:2)**.** This sense of relational agency is acknowledged by Anderson et al. (2012:181) who suggested that within assemblage thinking ‘rather than attributing causality to humans and non-humans, it emerges through the nondeterministic enactment of practices of worldmaking’. In viewing this event as an assemblage within the fieldwork space I was aware that the more-than-human/human ecologies and intra-action were present, and attention needed to be paid to the flows, intensities, activities and movements that gave

the fieldwork space its qualities and properties. Whilst exploring my fieldwork notes of conversation snippets of the Lego-stream-geographer encounter above a found poem emerged (figure 55). As I revisited my notes, I was astonished to see the words on the screen – they felt like an expression of my feelings towards post-qualitative analysis.

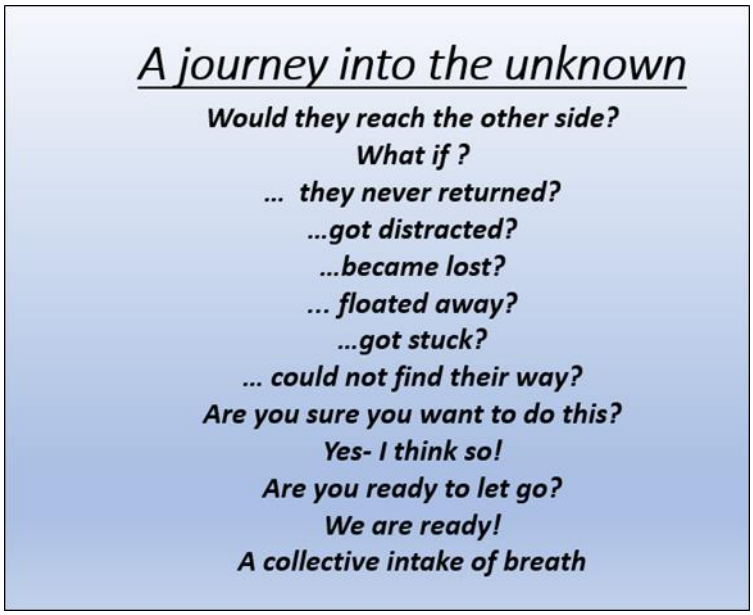


Figure 55: A journey into the unknown

6.6 Being lost somewhere/nowhere (Fraser & Fraser, 2017)

The record of my geographical fieldwork encounters with place assemblages sometimes felt like a messy collection of thoughts, experiences and ideas. As Taylor (2016a:20) suggested 'working out how to describe these activities, account for their effects and explain the passages of affect they make possible' is challenging. I am uncertain and find myself questioning my approach constantly- have I decentred the human enough? It is one thing to write that posthumanist/new materialist practices are complex, but it is another thing to enact the complexity existing within an entanglement of intra-acting encounters within fieldwork spaces. 'The very act of writing about them' and collaging is 'further entanglement in a complex array of entangled movements' (Davies, 2014:4). There seemed to be challenges at every step. Through the study I

have sometimes used the term ‘geographer’ to refer to my human participants; it has helped to maintain their anonymity. But I have realised in using that one term – geographers – I have simplified and labelled a group of people with a very complex range of identities, dispositions and capabilities, a diverse range of experiences in geographical knowledge and understanding arisen from past histories and experiences of fieldwork behaviours and practices. I wondered also if this was true of the more-than-human within the landscape too. Trees, pebbles, paths, materials etc. would also possess past histories and other entanglements which may impact. I am not sure I have any answers for these challenges but will bear in mind as I experiment through the rest of the study.

As I seek to disrupt ‘research-as-usual’ (Gannon, 2016:133) and geographical fieldwork-as-usual I have had to learn to live with this being lost as there is no map to follow. I find it reassuring to read about uncertainty and doubt in the texts of other authors who have explored posthumanist ideas and engaged in writing and collage experiments. Taylor’s (2016a) work on Educrafting has been particularly helpful as it has made me realise that I do not have to make any great claims about my study. I can offer my thinking and experimenting with posthumanist geographical fieldwork as emergent and provisional.

6.8 An invitation to think

What is different about relational fieldwork?

At the Acres Down heath viewpoint the geographers began to pose enquiry questions (figure 56):

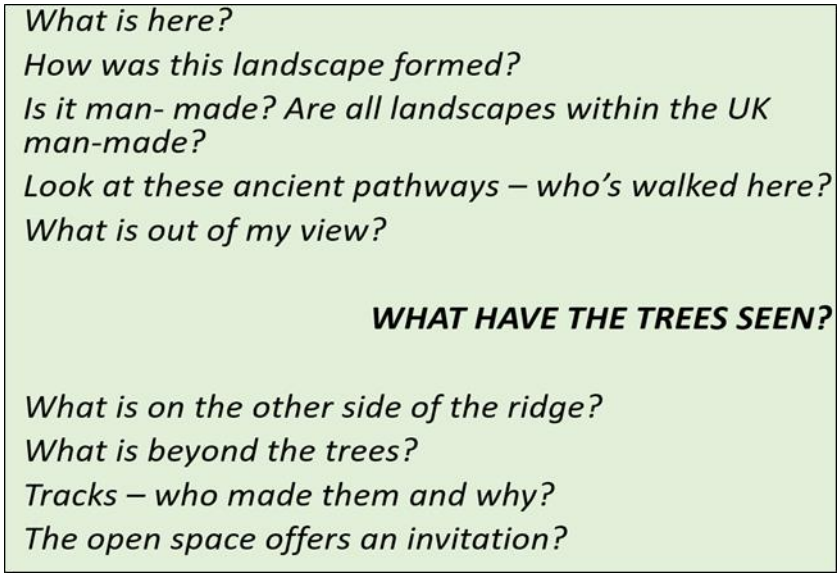


Figure 56: Emerging enquiry questions

The geographers began to describe and identify the human and physical features that they saw and label photographs using the IPad app 'Skitch' (see figure 57 below). Samuel started to look up the geology of this part of the New Forest in order to explain that the landscape in front of them had once been under the sea.

It felt like our journey to do geography fieldwork differently and to attend more closely to the more-than-human had come to a shuddering halt on the top of Acres Down. One response stood out '***what have the trees seen?****'.* It was interesting that in that moment at that specific location the group turned to key questions to frame their learning about this place. Was it the landscape and the open vista that nurtured this collective behaviour, the application of technology or could it have been that the geographers were returning to what they know - to familiar ways of exploring landscapes and places?

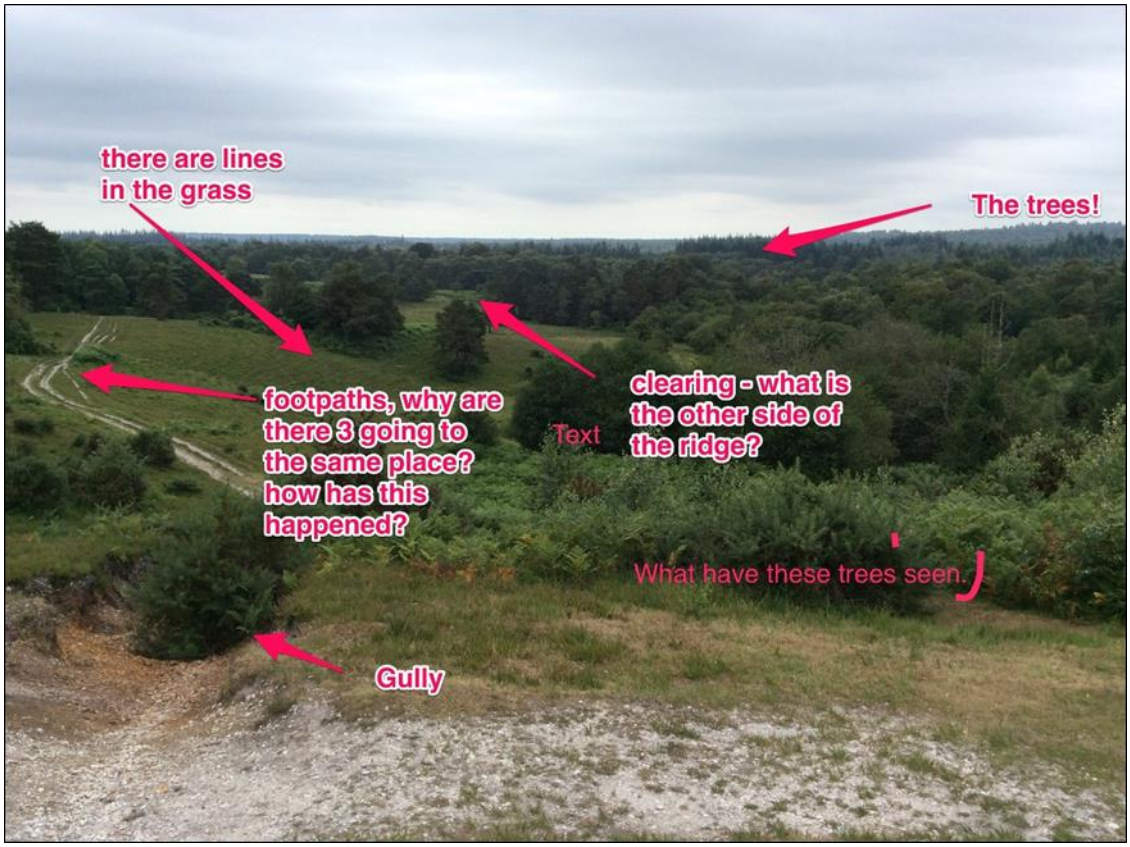


Figure 57 – An example of a labelled field sketch produced in Skitch

Asking questions and creating 'a need to know' through enquiry (Roberts, 2013:7) lie at the heart of good geography education and are widely advocated as an important approach to teaching (Ofsted, 2011, Ferretti, 2017). It was familiar territory and saw geographers adopting habitual thinking, returning to a more conventional approach to geographical fieldwork. Asking questions about places, recording landscapes, identifying and explaining features and reading signs and clues in the landscape are learnt behaviours which will have been instilled over years in the fieldwork practices of these geographers. This enquiry approach emphasises a geographers' curiosity and uses questions to frame a starting point (Roberts, 2010).

In seeking to take a posthumanist/new materialist perspective within this study I now see these existing constructions of geographical enquiry as problematic to my fieldwork explorations. Enquiry based learning has arisen from views of learning that

suggest geographical knowledge is a human construction prioritising ‘the need for the geographers to make sense of the world’ (Roberts, 2010:7). From a constructivist view geographical knowledge is not simply waiting to be collected ‘out there’ in the field; rather ‘what is ‘collected’ and how it is represented is shaped by the questions geographers ask, how they set about answering them and their existing understandings or imaginations’ (Roberts, 2010:6). Geographical enquiry privileges a human view encouraging geographers to find out about the world as an object of thought through asking their questions, separating the human and physical rather than considering how humans and the world can be placed in relation. It is not my intention to place enquiry and relational approaches in binary opposition for there are multiple ways that geographers understand the natural world and how it works producing ‘a diversity of geographical knowledges’ (Castree, 2005:244). Rather I seek a different perspective to decentre the human from geography practices to explore and nurture ways that geographers can be open to being in relation to the world.

It was idealistic to expect that in one fieldwork weekend participants would move completely away from familiar territory (deterritorialise). Formative experiences have a significant impact on geography educators, particularly regarding fieldwork and outdoor experiences (Catling, Greenwood, Martin & Owens, 2010). It was unrealistic that the human participants, who were all geography educators, could separate themselves easily from their usual ways of doing geography and being a geographer. Deterritorialisation risked challenging how we viewed ourselves as competent geography educators and so we returned to familiar territory. Deleuze & Guattari ([1988]/2013:363) refers to this return to territory as a ‘ritornelle’ or a reoccurring refrain. When travelling with new ways of thinking geographical fieldwork differently there seemed to be an on-going flow of movement between territorialisation,

deterritorialisation and reterritorialisation for the human participants. These movements were individual and/or collective moments that I have tried to be alert to within my fieldwork stories.

Within the reterritorialisation of geographical enquiry practices, there was a glimpse of different thinking. A questioning of approaches to geographical fieldwork has emerged with new lines of articulation (Deleuze & Guattari, [1988]/2013) that reveal a movement in thinking (Figure 58).

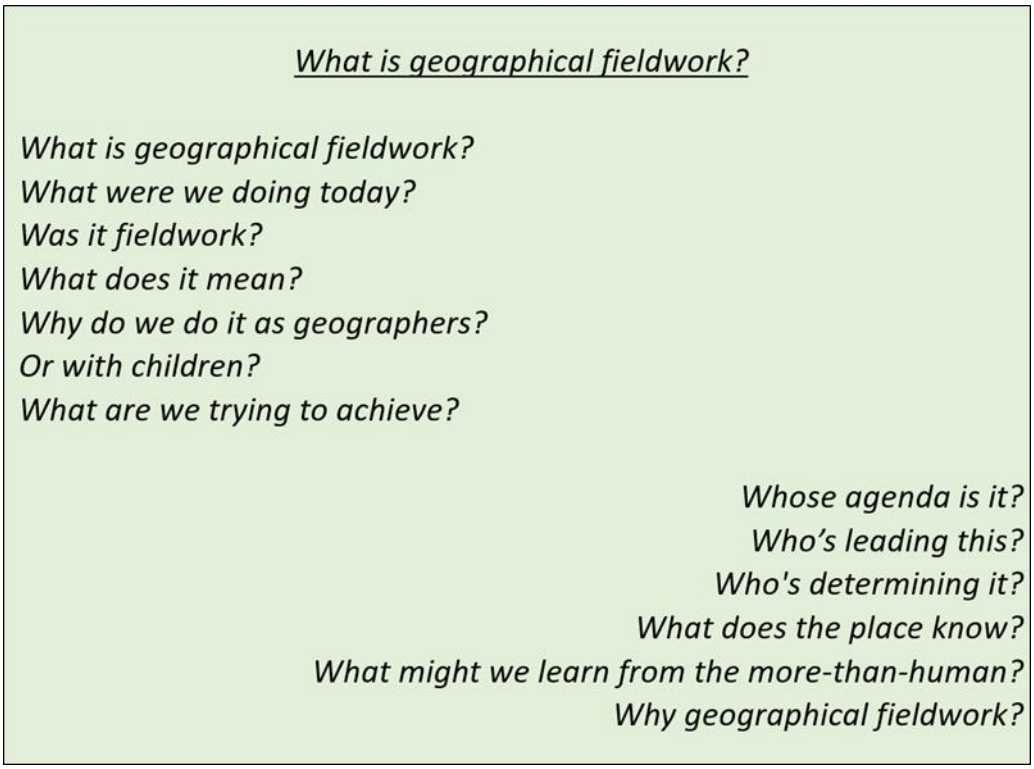


Figure 58: What is geographical fieldwork?

Travelling with a different view had possibly diffracted established views, provoking what Berlant (2010:103) describes as 'letting go of 'archaic attachments' to often hierarchical 'cultural traditions'' opening a 'space of sociality that listens, is receptive and calls for theory.' The participants asked some new questions and there were some sparks of new thinking, new directions and things still to come. as there was potential for new lines of articulation and openings for new lines of flight. It

reminded me that nothing about this fieldwork space was static – everything was in motion. The potentiality of this kind of practice is important in a world dominated by the National Curriculum and more didactic teaching approaches. It suggests that perhaps people travel along a continuum and relate new thinking to what they know leading to possible shifts in doing; they do not simply just let go of fieldwork-as-usual and start adopting the new practices.

6.9 An invitation to be still

Relational fieldwork involves slowing down
to spend time to 'be-with' places

Pahl (2002:148) in her work on family literacy practices, recognised that how when humans occupy space it 'shifts, turn by turn, as small movements take place on a moment by moment basis'. These shifts were evident in geographical fieldwork spaces too. As we sat on the heath posing questions and identifying features something changed. Acres Down heath invited us to pause in our wanderings and wonderings. I am not sure what prompted this change of pace and orientation to the place - it was just a feeling – a moment- an atmosphere. It was as if the heath would not remain passive, lifeless waiting for us geographers to do something to it. It was part of our research and drew attention. As a group we felt the offer of an invitation that called us into being, into immersing ourselves in this place.

Being in the midst of things seems to be significant when considering building relationships with the more-than-human. In order for 'new forms of ethical thought and practice' to grow Alaimo (2011:283) suggests 'submersing ourselves, descending rather than transcending' in order to dwell within and as 'part of a dynamic, intra-active, emergent, material world'. This required a letting go of anticipation about what we would experience in the fieldwork space with a shift to allow for 'active perception of

the unknown' (Le Quesne, 2015:95). So, there on the heath we spontaneously laid down on the ground (see figure 59). Many participants closed their eyes, others kept them open to watch the clouds. We listened to the wind blowing (digital file 21).

Figure 59: Being-with heath

Dear Reader,

Imagine yourself laying on the ground on the top of the Heath...
listen to the gentle wind blowing across your head...
Feel the hard ground underneath you...
Listen to the snapping of twigs beside you...
Feel the grass between your fingers...
Notice the squawk of a buzzard overhead...
Become aware of the shadowy presence of a copse of trees behind you...
Feel the open expanse of the heath space...
Watch the clouds moving steadily overhead...

Be still and pause for a moment.

Have you had an experience like this?
How did it make you feel?

Consider this experience as you read on...

Kind regards
Sharon Witt

Participants were invited to pause and dwell with the heath for a moment to be present and become acclimatised by paying attention to its ‘reverberations, its textures, its colours and its patterns’ (Brown, 2015:22). Participants were still, silent and patient. Thinking of this encounter has inspired me to create a collage thinking about the possibilities of embodied responsiveness in building relations. The collage is suggestive of a ‘sense of complexity, the sense that another landscape exists beyond the one you can subject to analysis’ (Lopez, 1996:12).

When accompanying students on fieldwork-as-usual I have often observed the distance between the students and the fieldwork space. There is a reluctance to touch, to become muddy and unclean, to become close. The collage in figure 60 reveals closeness, seeing, speaking, listening, acting, feeling, being, touching, smelling and knowing through intra-activity with the more-than-human. The collage features some of the physical play behaviours identified by George Graham et al. (2012) to help think through more-than-human place, movement and gesture. Throughout the fieldwork there were meetings and partings, invitations accepted and declined, conversations and silences, movements and stillness.

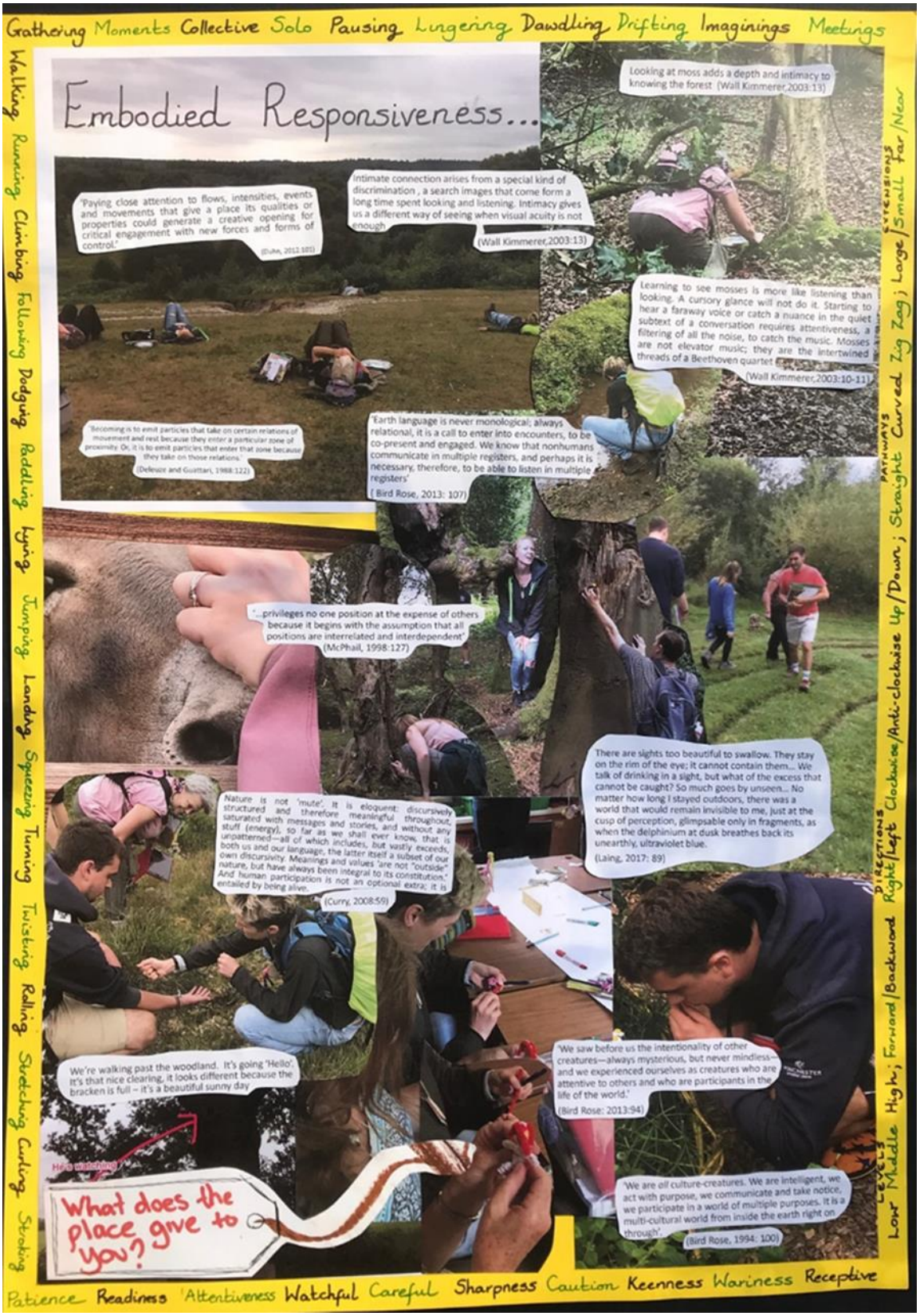


Figure 60: Embodied responsiveness: a collage

We did not set out to formally record or discuss our time up on the heath as this may have detracted from what seemed for many of the group to be a personal and intimate experience. But being-with the heath seemed like a pivotal moment inspiring poetry (figure 61) and art (figure 62) that attended to the more-than-human surroundings.

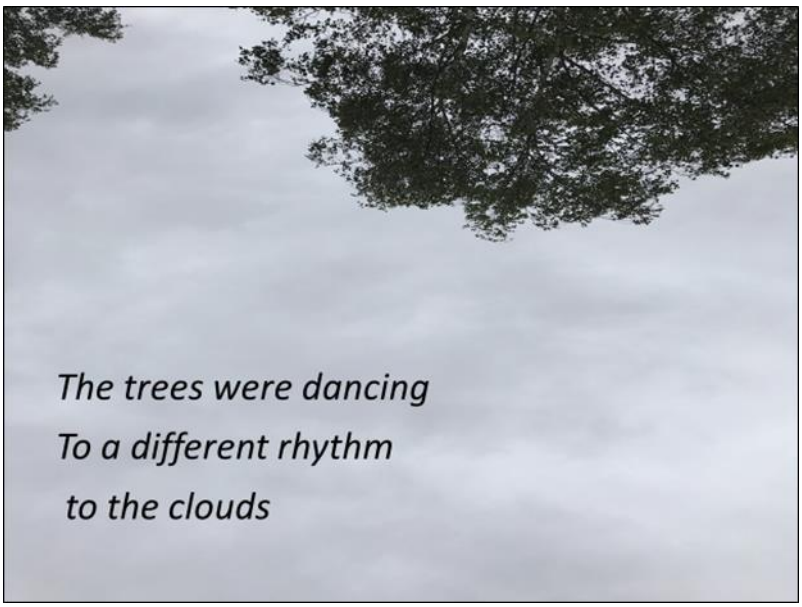


Figure 61: The trees were dancing -found poetry on one of the graffiti boards.

Figure 62: Artistic response to the trees on the heath

Qualitatively different questions seemed to emerge from being-with the heath (found on graffiti boards) and some suggestions of animal agency appeared on the emerging map (figure 63).

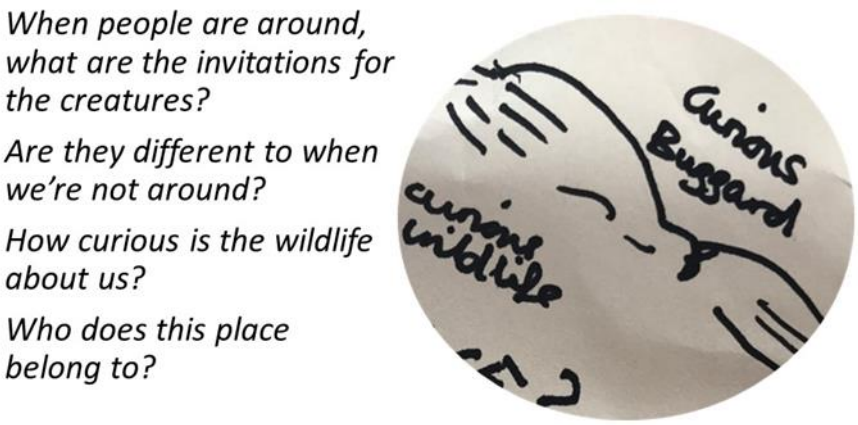


Figure 63: Emergent thinking…being-with heath

Being-with heath hinted that placing ourselves in the middle of, and in relation to, uncertain, contingent fieldwork spaces may generate possibilities for more-than-human/human relationships. In this heath-geographer assemblage I found myself deeply entangled with the material elements in this place. The encounter felt personal and meaningful, although I am not sure I could find the words to describe it. Perceiving this connection is thought important by David Abram (1997:52), an American philosopher and cultural ecologist, who suggested that being with nature creates:

> 'reciprocity, the ongoing interchange between my body and the entities that surround it. It is a sort of silent conversation that I carry on with things, a continuous dialogue that unfolds far below my verbal awareness.'

As humans recognise this mutual exchange with the world, our perceptions change. The world is no longer made of objects. Instead it becomes a place of relations where more-than-human/ humans are enmeshed within their unfolding and ongoing entanglement together. To nurture such reciprocity is not always easy or comfortable. Trudie said 'I noticed how tired I was … I'm so used to being physically active and also

being on the computer all day writing functional emails. I'm not used to being imaginative or creative and so doing lots of that today was exhausting'. There was a need to do things differently, to 'let go' of certainty and what you already know to become vulnerable to a place. Le Quesne (2015: 103) suggested 'it is an overtly courageous and political act to enter into and to change relationships' with a place. Lopez (1996:11) suggests it is key:

> 'to become vulnerable to a place. If you open yourself, you can build intimacy. Out of such intimacy will come a sense of belonging, a sense of not being isolated in the universe'.

Such enchanting relational encounters can lead to an 'intensification of our sensitivity to the world' and strengthen connections (Winks,2018:2). The type of fieldwork spaces seemed to matter. As Phoebe stated, 'I found that in such safe company, I was free to indulge actions I might not contemplate as a single traveller, such as, lying down in a strange place'. It has made me think about what constitutes a 'safe space' for geographical fieldwork and the role for the educator to support the creation of spaces that invite intimacy and reciprocity between more-than-human/human to emerge. The testimony from Phoebe above suggests that a freedom for participants to act was important. Perhaps the role of the geography educator is to look to sustain or inform the more-than-human/human relations through a disposition of proposal rather than imposition.

Lopez (1996: 12) explains:

> 'With a sincere proposal you hope to achieve an intimate, reciprocal relationship…that will feed you in some way. To impose your views from the start is to truncate such a possibility, to preclude understanding.'

Notions of freedom and democracy seem key to this process. Creating democratic fieldwork spaces was challenging due to inner tensions and contradictions. Relational fieldwork spaces seemed to be fostered where knowledge and geographical activities were not imposed but emerged out of improvisation and experience. These fieldwork spaces required constant attention to balance potential and power with opportunities for autonomy and dependence. As Dewey pointed out 'the reality of active democratic engagement is such a mess of intention, emotion and action' (Scaiff, 2014:10). What a challenge for geographers to try 'to negotiate their energy, will and power' in such a way to enact agency' (La Quesne, 2015:103) to create spaces for more-than-human/human to come into relationship through co-production within fieldwork spaces. This was not fieldwork-as-usual. Samuel and Trudie explored this idea in figure 64 which contained snippets from a transcribed conversation.

What's the value of working like this?
How would a traditional geographer see this?
This place where the bowl is-
Imagine being told about the landscape formation
How it happened?
They'd have a notebook full of stuff
But would they remember?
We did it in a different way
We felt the landscape
The learning would be very different

Figure 64: What's the value of working like this?

6.10 An invitation to roll

Within relational fieldwork geographers remain alert for moments when more-than-humans can surprise us. They are open to affect and to being affected.

Five geographers were walking along a chalky path and agreed almost simultaneously that the hill was inviting them to roll down. This encounter led to spontaneous action in which they entered a hill-geographer assemblage. Preparations were made … bags were left at the top in a pile, coats were tucked in and hoods raised by some with the ever-present fear of ticks – encounter between bodies, chalk, sand, grass tussocks etc. while other participants chose to stand and observe. One group member ran to the bottom of the slope with an iPad to eagerly record the moment. The video of the event is 29 seconds in duration and can be watched here:

Hill-geographer assemblage (digital file 22)

In this section the challenge was how to document the complexity of multiple sounds, words and movements in this hill-geographer intra-action, whilst also considering its implications for posthumanist/new materialist fieldwork. I initially began by transcribing minute by minute the action and trajectory of each participant. Figure 65 reveals my attempt.

00.00.00	Five participants begin rolling- Beth, David, Natalie, Nick and Tim; some other Mark and Daisy are watching. Tessa is also videoing the experience
00.00.01	Beth: Screams Other screams unidentifiable and some ohhs Noises
00.00.02	David: Come on
00.00.03	Ohh Screams
00.00.04	Tim: ow!
00.00.05	David: oh no
00.00.06- 00.00.07	Trudie is laughing as she films the scene Screams in the background
00.00.08- 00.00.09	Beth: hi (name removed)
0.10	David is laughing Sounds in the background
00-00.11	Sounds

00.00.14	David: Oh, not rolling straight anymore
00.00.15	David: oomph!
00.00.16	Nick: Not the angle I was expecting
00.00.17	Laughter Sounds
00.00.18- 00.00.19	Nick: I thought I was going to go the other way Tim stops rolling and stands up Tim, I feel dreadful
00.00.20	Laughter
00.00.21	Laughter Sounds
00.00.22	Laughter Sounds
00.00.23	Oh --- Natalie: I was going to go forward and back again
00.00.24	Laughter Sounds Rolling
00.00.25	Laughter
00.00.26	Laughter Sounds Rolling
00.00.27	Nick: It is in waves and quite scary
00.00.28	Tim: I feel dreadful Speech but cannot hear it
00.00.29	Finish

Figure 65: An incomplete attempt at an audio transcript of hill-geographer assemblage video

I realised quickly this transcription was a hard task. There were the actions, sound, speech of five geographers and the observer to note. I had produced a chronological human centred account of an event and had jumped to representation and interpretation (Maclure, 2013). I found it challenging to find words for the sounds and movement that might do justice to the noises on the video. As Hackett & Somerville (2017:384) wrote 'words fail as much of this occurs at the limits of language'. The action, gesture, words, sounds and affect emerged simultaneously through a chaotic, messy intra-action in a polyphonic fieldwork space of bodies, grass, heathland, birds, air, slope; these were indistinguishable and connected. I came to realise that focusing

on what was produced within the intra-activity would help to foreground material realities (Maclure, 2013). What emerged was an understanding of the potential of encounters to affect and be affected (Deleuze & Parnett, 1987).

This hill-geographer encounter could be seen as an intensity and seemed to be a significant 'moment of meeting' (Pacini-Ketchabaw et al. 2017:34) that placed the more-than-human in relation with the human through intra-activity. An activity experience initially undertaken with enthusiasm and a lightness of spirit illustrated that encounters always disturb (Deleuze & Guattari, [1988]/2013) disrupting habitual ways of being and acting in the world (O'Sullivan 2006:1). The hill-geographer assemblage provided a momentary encounter where stomachs and backs met grass, grass tussocks met skin, arms and legs flew out of control as they met the ground, hoods flew off, an iPhone slipped out of a pocket; expected trajectories were interrupted. Human participants assumed they would be coordinating their actions as they predicted their pathways of travel and chatted about previous slopes they had rolled down, but as Pacini-Ketchabaw et al. (2017:34) noted 'nothing is reconfirmed in an encounter. The world is not already known.' This encounter was disruptive. Repeated watching of the video – the movement, sounds and words - revealed a different story. This encounter was a reminder that the heath was not static but had agency within human intra-actions. The more-than-human appeared to have vitality shaping the human. It was the surface of the hill and the slope, the lumps and bumps of the grass tussocks that generated the sounds and words shown in figure 66 (taken from the audio transcript in figure 65 and fieldnotes) to show how the human participants were affected by their intra-action with the hill. In this moment of meeting 'we are forced to thought' (O'Sullivan, 2006:1).

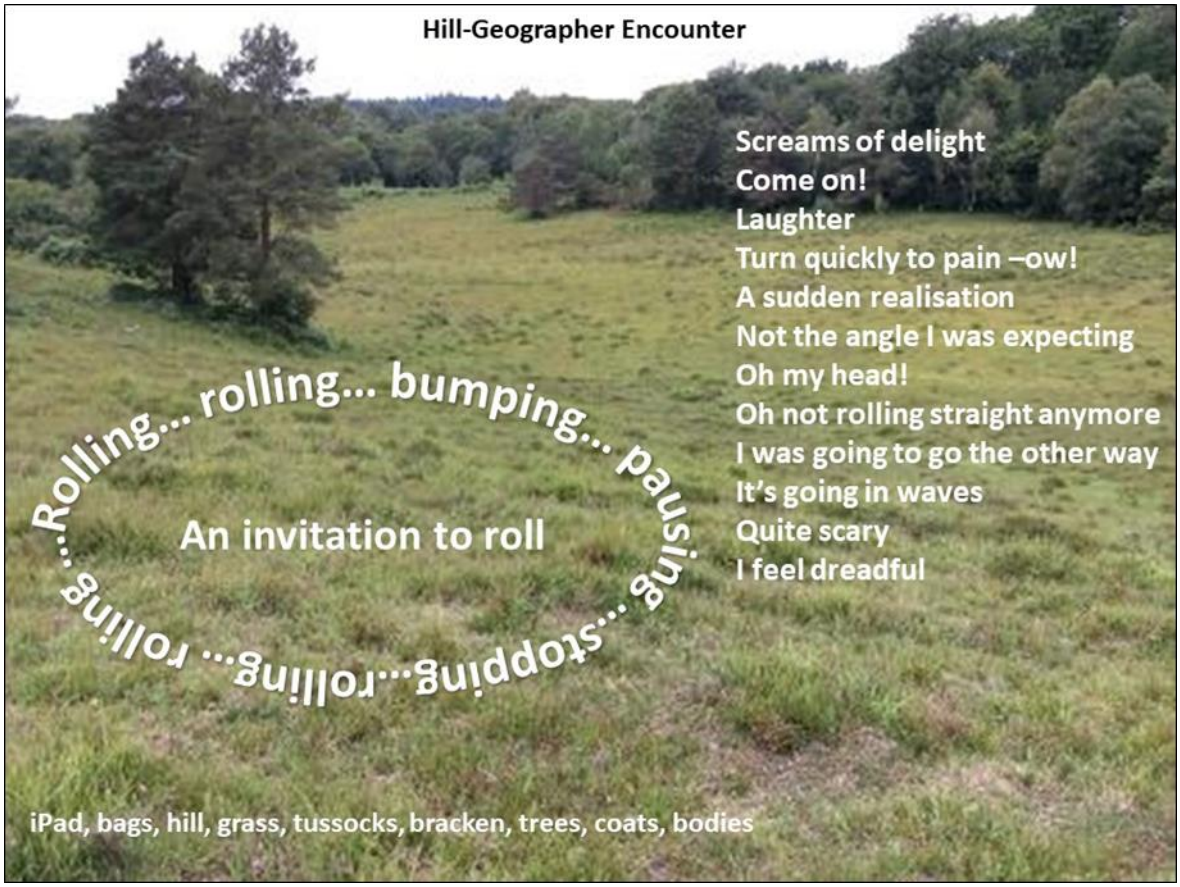


Figure 66: The hill-geographer encounter: a writing experiment:

This is a reminder of the vibrancy of that slope. Once implicated in the hill-geographer encounter, the human participants could not separate themselves from the assemblage but became entangled with the movement and vibration of the more-than-human world. Rautio (2013b:397) suggests that 'material is vibrant insomuch as it has the capacity to … impede the courses and wills of other material entities, such as humans', but also to act as a 'quasi-agent' with tendencies of its own (Bennett, 2010: viii). This encounter illustrated that more-than-human/human intra-actions in fieldwork spaces are not always a 'comfortable communion' (Winks, 2018:8). In this collective entanglement something seemed to change – a shift of power- a change of thinking - a movement of ideas that generated new understandings of intra-acting with 'an active world of lively materials' (Kind et al. 2014:9). A new kind of dynamic seemed to be set in action co-constructed through movement and sensory experience. The hill and grass

and slope asked questions of the geographers who responded in words, gestures, sounds, movement, actions that could be understood to be a 'world-forming communicative practice' (Hackett & Somerville (2017:387) in the ongoing emergent process of 'becoming' between geographer and the more-than-human world. This is a reminder that in seeking to nurture relational fieldwork spaces geographers must remain cautious about …

> '[human's] propensity to colonise places with our own intentions, desires and rationalisations. We must remain alert to the numinous and the sensual moment when something of place may be revealed that completely surprises us and that we cannot reduce to words.'
>
> (Wattchow & Brown, 2011:193)

Dear Reader,

Do you have a pebble near at hand?

Maybe your pebble is one you have collected and carried for a while or maybe you have a pebble in your garden?

Do you have a pebble that now sits in your home holding memories of a distant beach, a pathway once trodden, a volcanic landscape once visited? Where do you keep it?

Is it in the back of a chest of drawers, in the bottom of a jar or is it stored with other place mementos?

As you read this next section you might like to hold a pebble? Look at the colour, feel the texture, notice the patterns. Roll it around in your hand as the invitation to touch a stone during the New forest fieldwork is considered...

Kind regards
Sharon Watt.

6.11 An invitation to touch

Sensory engagement can bring more-than-human

and human into relation.

This section recalled an event on Acres Down heath where Clare, one participant, found a pebble or perhaps the pebble found the geographer. Whichever it was, within this pebble-geographer assemblage something happened – something linked one to the other. In traditional readings of fieldwork encounters this -pebble- geographer relationship would be seen as relatively straightforward as the agency for this action would reside within the human individual. This would situate the pebble as the passive object to be studied by the human for information about the environment. Indeed, Rodaway (1994:41) writing about haptic geographies, pointed out that a careful exploration of an object through touch might provide details about the 'size, shape, weight, texture and temperature'. Indeed, he believed that touch empowered humans as separate entities from the world to identify and categorise key characteristics of the environment (Rodaway,1994). Whilst Rodway (1994) believed that communication through touch could be mutually constituted, it is generally a relationship between organisms e.g. human and human, human and animal, human and some plants. He did not recognise the agency of non-living materials. Rodaway (1994:45) suggested that haptic encounters tend to be asymmetrical and emphasised the agency and autonomy of humans as the authors of this relation. This view highlighted the body-mind dualisms which I am seeking to avoid in my explorations of relational fieldwork. This view promoted human exceptionalism and created 'an active-passive dichotomy between the one who touches and the one touched' (Manning, 2007: xii).

More complex new materialist perspectives might suggest that the agency in the pebble-geographer encounter resided in neither the human, nor the pebble, but was located in the 'space in-between' (Rautio, 2013a:396). This encounter was not about the geographer forming relations with the pebble for humans are 'always already related to all of our material surroundings, organic and inorganic, and not just related, but constituted by it. So, in taking this view the focus is not on what the body in the encounter is, but what the body does and how it moves in 'a flow of entangled bodies' (Haraway, 2008:26). This focus invited us to notice the 'liveliness of the stone' (Jones, 2016:115) and the geographer together and to think about the intra-active encounter that was witnessed in figure 67, where there is potential that both the pebble and the human will be changed as a result of this meeting.

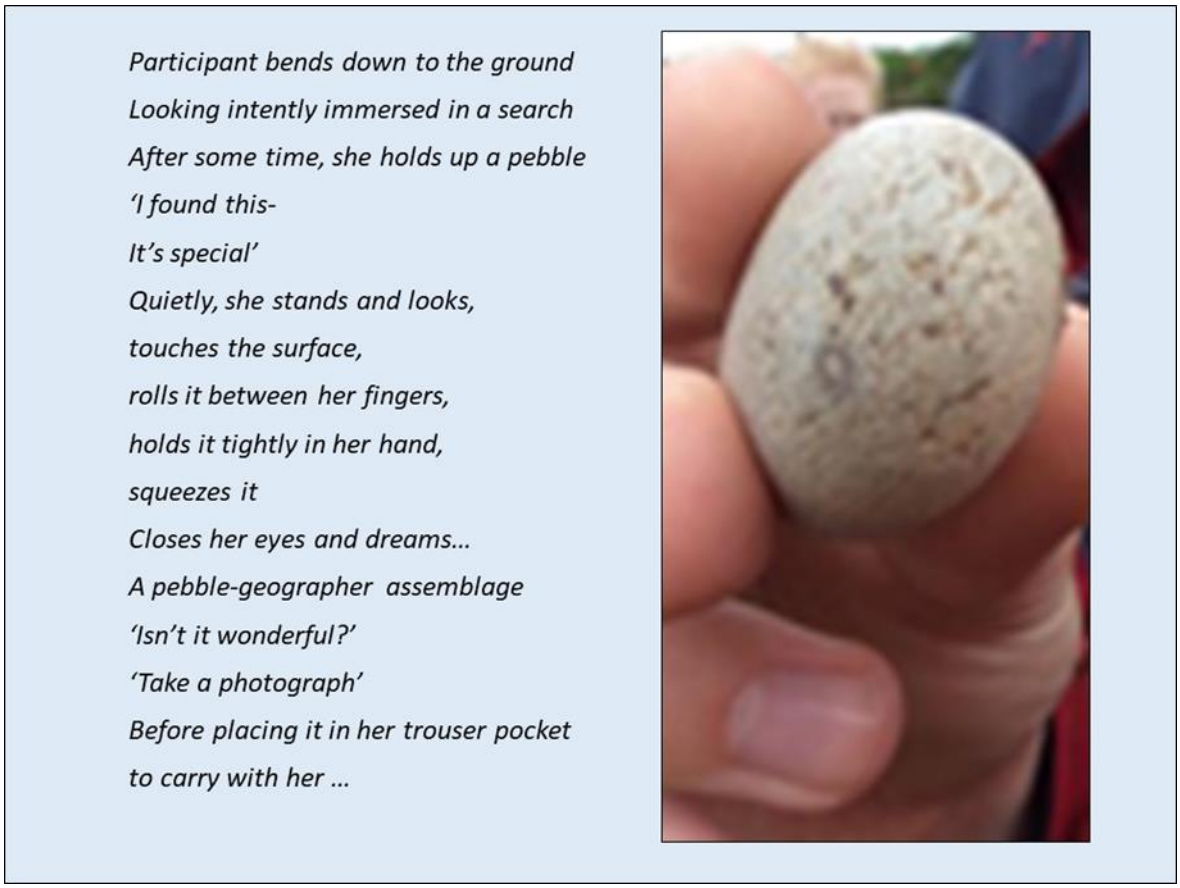


Figure 67: Geographer and pebble. A found poem from fieldnotes on the Heath

‘To touch [stone] is to be touched, to be affected, to be moved’ (Pacini-Ketchabaw et al. 2017:37). As Manning (2007:9) wrote ‘I cannot touch you without being responsive’. These intra-active encounters are often hard to communicate yet are clearly valued. They are difficult to express in words. Rautio (2013b:404) suggests the event of carrying stones makes us ‘literally weigh a bit more, balance our walk a bit differently, think certain thoughts and become certain kind of bodies and individuals in relation to what kind of stone-bodies we encounter and interact with’. This encounter was not planned, but just happened when the geographer’s attention was caught by the pebble. It is an ‘act of differentiation for us, the direction of this differentiation we do not know beforehand’ (Rautio, Ibid.). This stone/geographer assemblage helped Clare to ‘know [herself] as part of the world: simultaneously interdependent and unique.’

The invitation to touch is a powerful act that seems significant within this experimentation in fieldwork spaces. Touch is a complex concept to grasp as it is not simply the placing of hands on an object. I worked with Manning’s (2007) idea of touch as a gesture toward or reaching toward. She wrote:

> ‘To touch is always to touch something, someone. I touch not by accident, but with a determination to feel you, to reach you, to be affected by you. Touch implies a transitive verb, it implies I can, that I will reach toward you and allow the texture of your body to make an imprint on mine. Touch produces an event’.
>
> (Manning, 2007:12)

The act of touching as a momentary movement towards another. This other is not yet known but might emerge in the intra-action. Manning (2007: xv) suggested that ‘every act of reaching forward – enables the creation of a world. This production is

relational'. She wrote 'I reach out to touch you in order to invent a relation that will in turn invent my individuation' (Manning, Ibid.). A gesture of touch then contains so much potential for what might happen in the encounter. As Barad (2012:206) pointed out touch arouses 'an infinity of others—other beings, other spaces, other times.' There was an affinity between pebble/geographer within this assemblage. At the end of the found poem in figure 68 Clare removes the pebble from its location to place in her pocket. Some initial tensions surfaced as I wondered about humans' desire to own and manage the environment. It made me consider whether this was ethically the right thing to do? On re-reading Rautio (2013b) I realised picking up stones and carrying them was perhaps a more complex act than first contemplated. This everyday autotelic activity could be viewed as the geographer becoming part of 'a momentary event produced by a mesh of related bodies (human and non-human)'(Rautio,2013b:396). Perhaps it is worth considering whether 'elements in our surroundings make us collect them, to orchestrate and curate – to work with – our material world?' (Rautio, 2013b:404). It is perhaps an educator's role to create opportunities for geographical learners to remain open and maintain their availability to the material world within the fieldwork space.

6.12 A surprise invitation: the provocation of the Phoenix

A spontaneous opportunity arose when one participant introduced an evening provocation. 'Provocation is derived from the Latin, provocare, meaning to call forth, challenge, incite or instigate' (Kind, 2017: [online]). Making, parading and burning a tissue firebird was an intentional encounter (figure 68). An experiment to see what was set in motion when a group of geography educators explored possibilities of story, fire, darkness, sticks, paper, string, night and ceremony.

Human participants enter the classroom and gather around the long table covered in pea sticks, string, scissors and an abundance of red, orange and yellow tissue paper. Legends of Firebirds and the Phoenix are shared; stories from other places, of magic, of journeys, of quests… The Phoenix collects sensory information about the environment and the events unfolding within it …It is a gentle creature that lives lightly on the earth, eating only dewdrops…When the stories are finished participants with intense excitement and enthusiasm set about creating their birds. The tissue paper draws them in and they begin to crinkle, fold, wrinkle, crumple and pleat, tear and gather. Head emerging … from screwed up pieces of paper- sometimes secured with string. Paper and hands working together combining in unexpected ways to make and create… Laughter and joy as fire birds emerge and take flight. For others there was slight doubt and uncertainty as they encountered unforeseen and unpredictable problems with unruly tissue paper that did not seem to be co-operating…

Figure 68: The provocation of the Phoenix (extract based on fieldnotes)

This provocation viewed the materials within our assemblages 'not as lifeless objects, but as lively events' (Kind et al. 2014). We were beckoned in by the materials and came to know them 'in surprising ways' (Pacini-Ketchabaw et al. 2017:24). The event is shared on the collage in figure 69 below. We paid attention to the movement of paper. We joined with the movement of the paper when our phoenixes took flight- a tissuepaper-string-stick-human-phoenix assemblage (digital file 23). We thought about the ways of paper- for example it floats, crumples, tears, rolls and these were written on the collage. The making of the phoenix created a vibrant, social, ecological community where more-than-human and human came into relation. The material presence of the phoenixes possessed potential for action, movement and engagement with the possibility of enhancing relationships and shifting the ways we thought with materials.

Figure 69: The phoenix provocation: a collage

The fire was significant within our encounter for it provided a meeting place for more-than-human/human entanglements. Lopez, (2017: [online]) discusses fire as a space in between: '*inter canum et lupum*,' the region between the dog and the wolf, between the domestic and the wild. This emergent space felt unpredictable and exciting. The phoenixes felt like agitators within the fieldwork community. This seemed odd. St Pierre (2017:5) considered this 'too strange' as:

> 'the knot, the world kicking back, the too much that demands experimentation. Inquiry should *begin* with the too strange and the too much. The rest is what everyone knows, what everyone does, the ordinary, repetition.'

It is difficult to share the atmosphere, the spirit and the energy of the 'provocation of the phoenix' in words. The contagious laughter that rippled around the campfire, the sense of giddiness and camaraderie, the shrieks of delight as each phoenix was set on fire in turn. A night of wonder, giddiness and joy. We thought about the movement of the flames as they burnt, flickered, flared, blazed, roared. Participants were mesmerised by the fire – the flickering light, the crackling sound, the warmth and the distinctive smells drew us in. Wonder seemed to emanate from the fire, but it was also in the participants; a mutual entanglement. Maclure (2013:229) reminded us that 'wonder is relational'. At times this event was not comfortable -the flames proved unpredictable, firing sparks into the night sky. There was uncertainty and concern where these sparks might land – a visible reminder of the liveliness and dynamism of materials. This danger instilled a vigilance, caution and respect for material engagements and a desire to dampen, quell, control, supress and inhibit the liveliness of materials by some human participants present. Maclure (2013:229) reminded us that wonder 'is never entirely within our [human] control'.

The title of the collage was written in the charcoal from that fire as a physical reminder of that night (figure 70):

Figure 70: Charcoal markings from the fire

Whilst 'charcoal is a thing: a stick of compressed burned wood', Pacini-Ketchabaw et al. (2017:34) suggested 'it is also a continuum, a story, an event, a happening, a doing'. The charcoal formed part of this ineffable and unfathomable event. An encounter full of what Waller (2011:65) described as 'mythical strangeness and poetic unknowing'. The poem present on the collage shares words, thoughts and phrases from fieldwork participants' experiences and is bordered by the word phoenix written in the many languages where the myth is prevalent. I cannot speak for the others around the campfire that night or claim to know the affective intensities that were felt, the alliances that were made, the cracks that appeared within relationships. I felt compelled to include the provocation of the phoenix within my stories as the event commanded attention because it seemed to 'defy explanation' (Somerville, 2016:1163). St Pierre (2017:5) suggests that within post-qualitative inquiry this is what we should be doing: 'pushing toward the intensive, barely intelligible variation in living that shocks us and asks us to be worthy of it. It asks us to trust that something unimaginable might come out that might change the world bit by bit, word by word, sentence by sentence'.

6.13 An invitation to wonder

Relational fieldwork should not be a one-off event, but needs to be part of an ongoing, enduring lifelong commitment to engage in ethical relationships with the more-than-human world.

> *Sundew plant stopped us in our tracks. It sat in soggy Sphagnum mosses in the boggy heath. Hannah, Clare and Trudie were mesmerised and fascinated by the plant. They bent down to get closer to the plant. In silence they knelt with the plant. They felt the 'give' of the boggy ground underneath their boots and were captivated by the Sundews' leaves and the hair-like tendrils glistening 'dew' waiting for a passing insect. They too waited…*

Figure 71: A sundew stopped us in our tracks – an extract from fieldnotes

These participants were captivated by their unexpected encounter with a sundew (figures 71-72) which was 'a moment of pure presence' (Fisher 1998:131).

Figure 72: Encounter with a sundew

Fisher (1998:131) explained that:

> ‘the moment of pure presence within wonder lies in the object’s difference and uniqueness being so striking to the mind that it does not remind us of anything and we find ourselves delaying in its presence for a time in which the mind does not move on by association to something else’.

I would like to suggest that in this moment within the Acres Down bog the sundew-geographers–affectiveresponses-boots-water-bog-sphagnummoss-grass-thegive-ess of the ground- came into relation as an assemblage; an assemblage in which difference generated a unique sensory and affective intra-active encounter of fascination. The participants’ attentiveness to the sundew plant was not so much about looking at the plant, but ‘pausing in the relations in between’ the assemblage (Ketchabaw-Pacini et al. 2017:39-40).

This encounter with sundew seemed to be a moment in which several participants engaged in ‘a discerning and meticulous attentiveness to the singular specificity of things’ (Bennett, 2001:4). A moment of wonder which led to a ‘temporary suspension of chronological time and bodily movement’ for those who experienced it (Fisher, 1998:131). The sundew assemblage created heightened sensory activity with other human participants being invited in to notice the colour of the plant, the stickiness of its tendrils, the unexpectedness of its position. I noticed that participants’ heads, necks, hands, legs, and feet were being drawn towards the bog as they came into relation with sundew. This movement of ‘getting grounded’ (Land & Danis, 2016:32) seemed significant to participants’ paying attention to and becoming close to particular features in the environment. From a posthumanist perspective, it is important to think movement beyond human bodies only. As well as generating enchantment - this

encounter with sundew (figures 73 and 74) proved also to be destructive. On reflection this became a tension within posthumanist perspectives

> *After time spent kneeling with the sundew, knees began to ache, and participants felt they couldn't get close enough to 'have a really good look at the sundew' in situ. Clare picked the plant, so she could stand up more comfortably, see it more closely, and take a photograph as a memory of their encounter in the bog.*

Figure 73: To get a closer look - extract from fieldnotes

The photograph in figure 74 is interesting as it shows the close attention that this participant is giving to the sundew through the lens of an iPhone. It is a possible example of deterritorialization and how fieldwork participants moved from being in relation within a moment of enchantment to view the sundew as an object to be picked and studied. It seemed relatively easy to slip back into ways of observing and recording features in the environment from a distance. In a fleeting moment the quality of this encounter had changed. It reveals how place assemblages are always in constant motion and in constant formation changing according to constituent parts. Relational fieldwork needs to be viewed as an on-going commitment. It is not about a one-off experience, but an enduring, continuous lifelong process to attend and attune to the detail of the natural world.

Figure 74: Looking closely

6.14 Enchanting fieldwork

The nature of enchantment does not lend itself easily to articulation or analysis. It is a difficult idea to comprehend because in the act of knowing, identifying and defining, an encounter can lose its enchantment and so makes this area problematic to study (Curry, 2012).

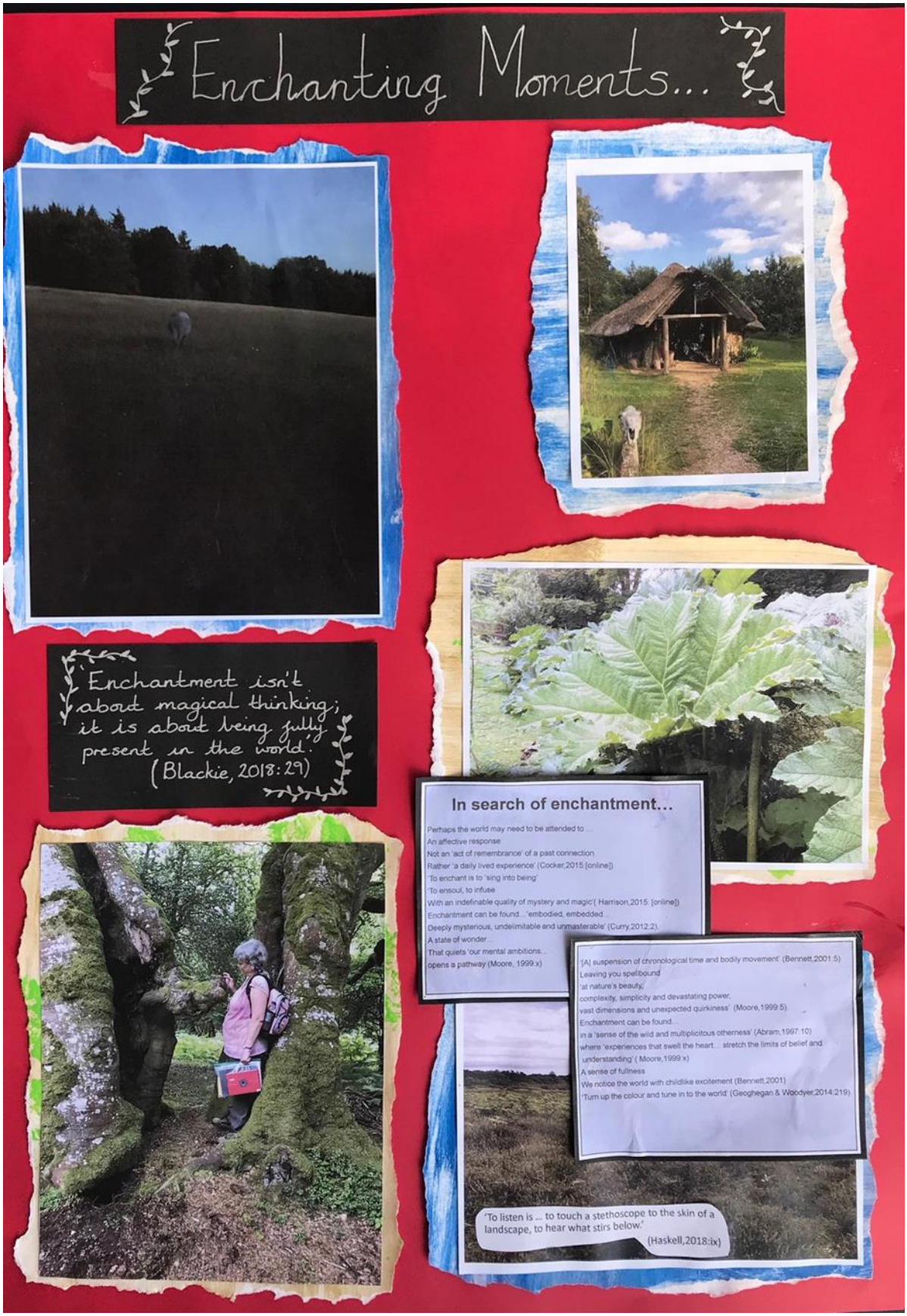


Figure 75: Enchanting moments: a collage

The photographs on the collage in figure 75 are reminders of ‘enchanting moments’ through the weekend. I have avoided too much comment about each photograph within the collage but have shared here a brief background for each encounter. The first photograph revealed our experience of darkness falling, entering a world of shadows, stars and moonlight as we stood by Sir Arthur Conan Doyle’s grave in the grounds of All Saints church, Minstead .The Iron Age Hut shown is a special place full of stories, fire and hums (digital file 24) . We wondered here if places have a natural musical key? One of the other photographs featured the ‘dragon tree’ a place that needed to be passed with care – a stroke on the nose, a tickle, a pause for attention; a reminder of the importance for educators of making room for imagination within more-than-human encounters.

The photographs within the collage are backed by experiments in colour and materials – the clay from the earth at Minstead, water from the Minstead stream and prints from New Forest bracken (figures 76-78).

Figure 76: Colours of clay from the Minstead earth

Figure 77: Water colour with Minstead stream water

Figure 78: Acres Down bracken print

As part of my doctoral study I produced an academic piece of writing entitled ‘fostering enchanting moments within geographical fieldwork spaces’ I share in the collage and replicate below in figure 79 as a found poem.

In search of enchantment…

Perhaps the world may need to be attended to …
An affective response
Not an 'act of remembrance' of a past connection
Rather 'a daily lived experience' (Cocker,2015:[online])
'To enchant is to 'sing into being'
'To ensoul, to infuse
With an indefinable quality of mystery and magic'(Harrison,2015: [online])
Enchantment can be found…'embodied, embedded…
Deeply mysterious, undelimitable and unmasterable' (Curry,2012:2).
A state of wonder…
That quiets 'our mental ambitions…
opens a pathway (Moore, 1999:x)

'[A] suspension of chronological time and bodily movement' (Bennett,2001:5)
Leaving you spellbound
'at nature's beauty,
complexity, simplicity and devastating power,
vast dimensions and unexpected quirkiness' (Moore,1999:5).
Enchantment can be found…
in a 'sense of the wild and multiplicitous otherness' (Abram,1997:10)
where 'experiences that swell the heart… stretch the limits of belief and understanding' (Moore,1999:x)
A sense of fullness
We notice the world with childlike excitement (Bennett,2001)
'Turn up the colour and tune in to the world' (Geoghegan & Woodyer,2014:219)

Figure 79: In search of enchantment – a found poem

Dear Reader,

Imagine you are walking across the valley of Acres Dowth Heath...

You notice the ground becoming springy under foot. You are aware of your boots squelching as you cross the lively carpet of sphagnum moss.

I invite you to listen to the audio clip of a bog/geographer encounter (digital file 25).

Close your eyes and imagine yourself there...

How might you move?
What might you notice?
What may you do in relation to others?

The following section shares thinking arising from an invitation to bounce on the bog...

Kind regards
Sharon Watt

6.15 An invitation to bounce …

Listen to the sound of the bog (digital file 25)

Within this bog-water-sphagnum moss-boots-livelybodies-sundew assemblage we moved together until the shaky, wet, unsteady ground underfoot invited the geographers to pause and tread cautiously. In mingling with the quagmire, the participants stamped, moved, wobbled, waved their arms around to balance, giggled, felt the earth vibrate and experimented with the springy-ness of the bog. Suddenly, Tim acted on an invitation to bounce energetically. This event was recorded in slow motion and the springiness of the bog can be experienced here in digital file 26.

Thinking, feeling and bouncing with the bog enabled this participant to be present and completely immersed in the moment - in relation with the bog. On one of the graffiti boards the poem in figure 80 was found:

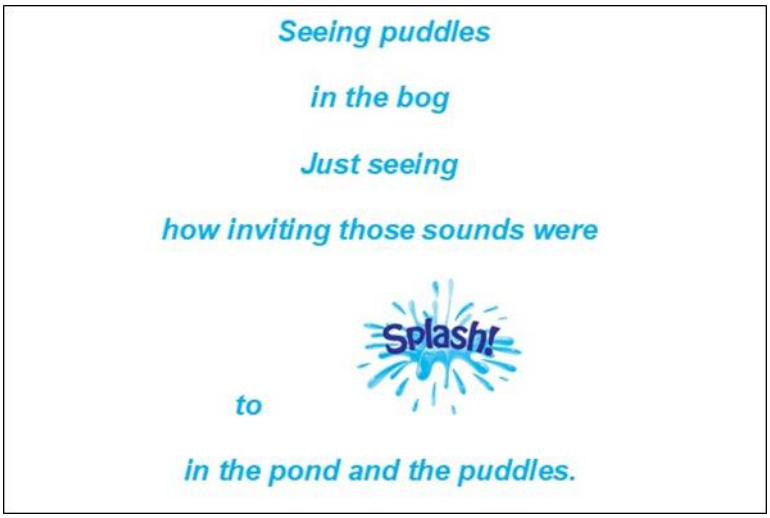


Figure 80: The invitation of the bog

Tim seemed to enter a unique relationship with the space unaware of anything other than bounciness of the bog. He was oblivious to his fellow participants, who were watching surprised at his exuberant enthusiasm for physically engaging with the bog. The movement was felt and sensed by both the human participant and the bog. They affected and were affected by one another (figure 81).

Figure 81: Bog-Tim engagement

Place responsive encounters, such as the bog, seemed to lead to an intensification of the participant's sensitivity to the material detail and features within fieldwork places. Yet being open to place invitations within fieldwork spaces can be risky as you cannot be certain what thoughts, feelings, actions and possibilities may be provoked. Responding to place invitations can present situations that make geographers feel vulnerable, uncomfortable and exposed to the uncertainties and contingencies of place. The bog provided a good example of how engagement within place assemblages can be uncomfortable for learners, yet shape ideas and lead to new understandings of how self relates to the world, both more-than-human and human. A poem entitled 'Perhaps I should not have done that' was found on the graffiti board (figure 82). This poem suggested the encounter with bog generated transformation. It hinted at 'a shared vulnerability' (Braidotti, 2013:129) between the bog and Tim that may have led to the forging of productive relations 'out of injury and pain' (ibid, 130).

Perhaps I should not have done that?
Have we invited ourselves to do this?
I wonder what the bog was thinking?
Should we have jumped in the bog
and left all those marks?
Does the place want us to hurt it?

Figure 82: Perhaps I should not have done that? A found poem

Figure 83 revealed the beginnings of a growing awareness that 'the ethical responsibility of an individual human now resides in one's response to the assemblages in which one finds oneself participating' (Taylor, 2010:37).

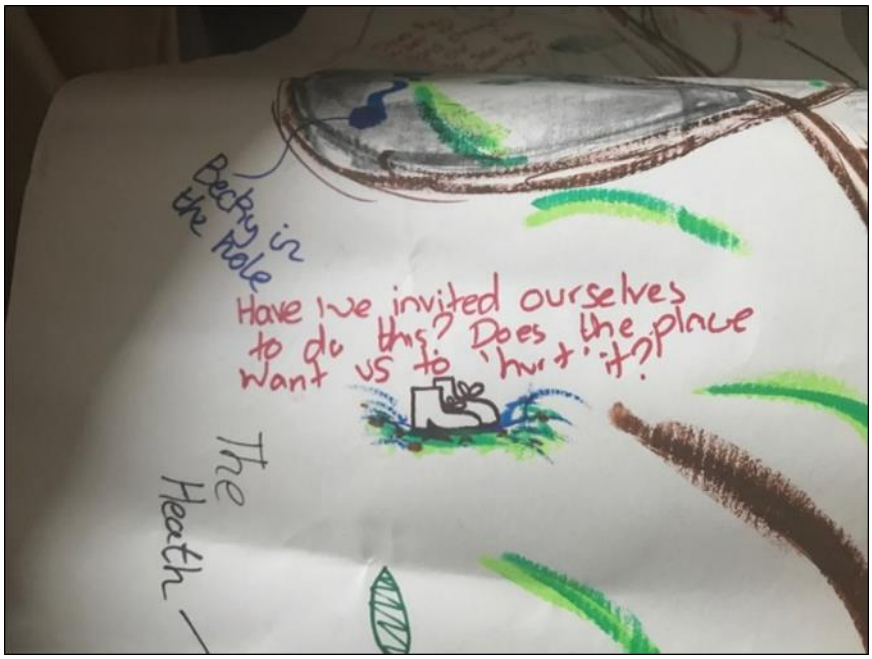


Figure 83: Does the place want us to hurt it? An emerging map extract.

This fieldwork encounter was a project of 'becoming'. For as La Quesne (2015:103) suggests:

> ‘To experience a new perspective with reality and to be sentient to such developments represents a significant adventure. It is an overtly courageous and political act to enter into and to change relationships.’

To be undone by the marks left in the bog was a powerful and risky thing. Such discomforting experiences create opportunities to ‘reflexively examine the social and cultural narratives which give rise to injustice’ (Boler,1999 in Winks, 2018:392). This is explained clearly by Pacini-Ketchabaw et al. (2017:40) who write ‘it is necessary to allow ourselves to be undone and to attend to that which ‘undoes us.’’ It may be important to recognise the transformative potential of relational practices when geographers are placed within the middle of fieldwork sites and processes.

6.16 An invitation to immerse …

A participant comes across a fallen tree. Figure 84 reveals this assemblage and shares some of the geographer’s thoughts within a found poem. After a few moments of observing the tree she suddenly takes up an invitation to climb into a hole underneath the tree. This action was a magical moment of encounter which disrupted fieldwork-as-usual and brought Beth into a different relationship with the fieldwork space. ‘This act of moving … to another place, a new encounter with surroundings … is immense’ (La Quesne, 2015: 103). It is an encounter that took the participant away from habitual geographical fieldwork practices that might see this as an opportunity to discuss cause and effect for the tree felling and look for explanations of the tree’s demise. Instead this was an unexpected moment where body and tree, leaves and moss co-mingled and merged – where more-than-human and human became close and familiar and were no longer separate and distant.

Figure 84: A fallentree-geographer-hole assemblage

This contact enabled the place to be experienced bodily through the senses. For Beth this was a joyful, immersive encounter in the here and now; one that Deleuze & Guattari ([1988]/2013:304) might call a 'haecceity'- an encounter that moves the soul. Davies (2014:10) drew on Deleuze's description of haecceity to explain that this was an experience of being immersed in the present moment in such a way as one is 'acutely affected, completely absorbed and moved'. Deleuze (1988:19) suggested that 'in entering into joyful composition with the world we encounter, is to form a more powerful whole'. Entering into relation with the tree was an act of trust. Beth said she trusted that 'the landscape would not hurt her'.

This willingness 'to open oneself to the unpredictability of the world' and 'respond to the assemblages we become part of' (Pacini-Ketchabaw, 2017:43) seemed to be a significant element of a relational geography fieldwork experience. Beth engaged in a process of becoming-different changing her thinking and questioning her actions. This

shift suggested the ‘capacity to enter into encounters to re-compose ourselves, to be affected *enhances* our specificity, and *expands* our capacity for thought and action’ (Davies, 2014:1).

6.17 Belonging within more-than-human worlds

The collage in figure 85 shared participants’ grapplings with ideas of human decentring within our New Forest fieldwork space. Emerging from our thinking on invitations some questioned whether it was truly possible to shift attention from the human to focus on the materials, elements, animals and non-living things within the fieldwork space. There appeared to be some concern over who issued the invitations within the fieldwork. As Nick asked ‘Is it possible to receive an invitation at all? Do we (humans) only invite ourselves on to something?’ Yet interestingly adds, what does the place think of this? Several of the participants considered who was in control of our fieldwork adventure- the humans or the more-than-humans. Harriet and Mark both discussed being drawn to the tepee.

To move beyond human geography there was a need for geographers to attend to the ways places may communicate through intra-activity with the more-than-human. But Deacon (1997:31) suggested humans ‘tend to underestimate the complexity and subtlety of much non-human social communication’. More-than-human species communicate with each other – and with humans – ‘in sophisticated and sometimes elusive ways’ (Daly, 2015). Bird-Rose (2013:102) suggested humans need to become ‘open to the idea of nature’s own expressive voice.’ This is a matter of ‘listening, waiting, learning and repeating…in learning to be affected’ and becoming more ‘alert to the ways’ [humans] are ‘moved, put into motion by other entities humans or non-humans’ (Country et al. 2015:276).

Figure 85: Belonging within more-than-human worlds: a collage

Within posthumanist perspectives geographical fieldwork spaces situated geographers as belonging with the world rather than being separate or distinct from it. This disposition is illustrated on the collage by Margaret Attwood's poem - 'The Moment' which reminds humans that we belong to the Earth rather than humans owning the world. Mee & Wright suggested (2009: 772) 'belonging is an inherently geographical concept.' Belonging in this context is used not to refer to ownership but refers to its etymological origins where the term is used to mean having a strong connection with, or close affinity with. It is perhaps a useful term for relational geographies as 'belonging connects matter to place' (Mee & Wright, 2009:772) and so brings an affective dimension into more-than-human fieldwork.

An interesting range of views was shared as we travelled with the ideas of more-than-human invitations. David was happy to 'put his trust in the place' in order to become entangled in relations with the more-than human elements. Whilst, Tim was convinced that the more-than-human had little impact in determining the invitations of place which were solely driven by human intention. Yet Barry Lopez (2015: [online]) felt that 'every natural place…is open to being known'. But some fieldwork participants were disappointment when their efforts to communicate with sheep were met with more-than-human indifference. Beth stated, 'they turned their backs to avoid an encounter'. This quote brought to mind Robert Macfarlane's poem, 'Willow' in MacFarlane and Morris (2017), which suggested that even if humans are open for encounters the more-than-human may not want to engage:

'Even if you [humans] learn to utter alder, elder, poplar, aspen

you will never know a word of willow

for we are willow and you are not'.

Kohn (2013:1) argued that 'how other kinds of beings see us matters.' Encounters with other entities force us to recognize the fact that seeing, representing, and perhaps knowing, even thinking, are not exclusively human affairs. Relational fieldwork is not straightforward. It is a fragile, messy and uncertain concern. Belonging needs to be 'actively practised' and is a 'highly political activity' (Mee & Wright, 2009:776) because there is a constant negotiation and renegotiation as to who is included and who is not and whose presence is recognised and whose is not.

In considering our belonging to a more-than-human world Nick offered a formula for experiencing place invitations (figure 86), which came from a desire to consider the elements of a place that influenced take up of personal invitations:

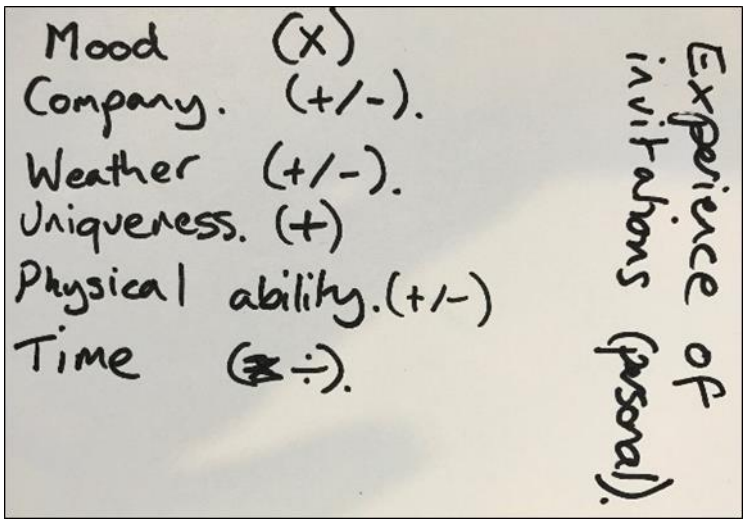


Figure 86: A formula: experience of place invitations

Interestingly, this is quite human-centred considering mood and physical ability, which are human attributes. It does not state whether 'company' includes the more-than-human. Perhaps, this is an example of how humans are keen to frame and explain what constitutes 'good' adventure experiences in order to replicate or maximise potential for fieldwork. This act is understandable given the limited opportunities within the school curriculum to take children off-site. However, having one formula does not

account for the fact that places are always in a state of flux, so it is not possible to be certain about the assemblages of objects, humans and more-than-human elements, ideas, things at any given time. This complexity is daunting for educators who have to fill in risk assessment forms predicting and anticipating and controlling 'risks' in advance of the fieldwork. It has made me consider what offsite and adventurous risk assessment may look like within posthumanist perspectives. I wonder whether it could be a set of ethical commitments regarding intra-actions within fieldwork spaces. This could be a stimulus for future conversations.

Creating the conditions for geographers to engage with 'more-than-human sociality' (Tsing, 2013) is an important role for the educator to consider. Within our fieldwork Phoebe and Trudie voiced a wish for more time alone with place. Both found other humans and the camera lenses were a distraction from more-than-human invitations. Whereas Samuel wrote 'I did not want to travel lonely - by myself- but I felt that the place invited me to find solace'. Yet he later added 'in the end I sought solitude and enjoyed it,' perhaps hinting at the beginning of a change of orientation to becoming more comfortable with the more-than-human fieldwork space. From a posthumanist perspective I found it interesting to consider whether it was truly possible to be alone in relational fieldwork spaces that were full of more-than-human presences as geographers are situated in places of pluralities. As Haskell (2018: viii) reminds us:

> 'We're all — trees, humans, insects, birds, bacteria — pluralities. Life is embodied networks. These living networks are not places of omnibenevolent Oneness. Instead, they are where ecological and evolutionary tensions between cooperation and conflict are negotiated and resolved. These struggles often result not in the evolution of stronger, more disconnected selves but in the dissolution of the self into relationship'

Dear Reader,

Do you share your life with a companion species?

Have you ever waited in hope for an animal encounter?

Can you recall an animal encounter? How did it make you feel? Did it make you see the world differently?

Have you had a challenging animal encounter? What happened? Would you do things differently if you found yourself in the situation again?

Imagine you are walking in a woodland with paths delineated by bracken. This is a dark place that is full of trees - living and fallen. It is full of leaves, tree stumps and grass. Imagine you come across a small group of seven or eight ponies who are moving and grazing through the area.

You enter the contact zone and a story unfolds...

kind regards

Sharon Witt

6.18 An invitation to follow

Relational fieldwork creates meeting places with difference and otherness

Our fieldwork space became a 'contact zone' (Haraway, 2008:4) for a serendipitous pony/human encounter (see figure 87). Taylor, Blaise & Giugni (2013:54) suggest that this can provide a different perspective 'making room for both the familiar and otherness, encompassing humans and non-humans, the material and the social'. Within this entanglement New Forest ponies and geographers actively engaged with each other and became mutually co-implicated in their unfolding story. This encounter was 'a moment of meeting, where things and forces and human and non-human beings' came together 'in spaces of difference' (Pacini-Ketchabaw et al. 2017:34). It is in the contact zone of geographical fieldwork spaces where we can 'grapple with' (Taylor et al. 2013:54) notions of difference and otherness.

Figure 87: Being-with ponies

In the pony/human assemblage video, Beth begins to follow the horses (digital file 27) and as they settled to graze on some grass she stands, watches and waits. This kind of chance encounter cannot be planned for on fieldwork but tends to be marked by 'a sense of not knowing, of hopeful waiting' to see what might emerge

(Pacini-Ketchabaw et al. 2017:350). This optimistic watchfulness seems to be an important way of connecting to the more-than-human elements within a fieldwork site. It is in these moments of 'undecideability' that participants 'emerge or come into being' (Osberg & Biesta, 2008:48). As Pacini-Ketchabaw et al. (2017:1) explains this kind of worldly encounter can sometimes be 'risky'. It is interesting to listen to Natalie on the video issue a warning to take care and 'don't go too, too close'. It also shows how some members of the group were perhaps less open, more reticent to entering into a pony-human relationship. Following the ponies, combined with hopeful waiting led to a further encounter for Beth which she shared in her blog (figure 88).

A stand out moment for me was walking with the New Forest ponies. To be in the centre of them, I felt totally immersed and trusted by them. It wasn't until I got home that I started to reflect on it. As soon as I told my mum she gasped and asked 'did you get any photos?' I was disappointed to admit that I may have missed that opportunity. But in actual fact maybe it was a good thing that I 'missed' that part of the opportunity, because I got to engage with them completely naturally. If I had got my iPad out, something unnatural to them, it may have started and potentially ruined the invitation to join and walk amongst them. It could be that the invitation was to be completely unrestricted and to take the opportunity as it was. It could have also been an invitation to learn that not every memory needs to be evidenced. I hate to admit that I have become one of those people where 'if I don't Instagram it then it didn't happen'. So I actually cherish the fact that I was I didn't even think to take a photo. I feel as if I was trusted to walk with them and I would have been foolish to have passed this invitation up to keep up with the group.

Figure 88: A stand out moment

In this extract Beth suggested that the New Forest ponies issued an invitation for her to join them – a mutual intra-action of ponies, trees, paths and grass. After this pony-geographer meeting Beth seems to be thinking her actions in the world differently. She begins to question her ability to be in the moment and her use of technology. Taylor et al. (2013) suggest that 'times and spaces of strange encounters

can be transformational'. Deleuze's *'Difference and Repetition'* (1974) suggests that encounters force us to think. They set something in motion (Pacini-Ketchabaw et al. 2017). An encounter can cause a rupture as it disrupts our existing knowledge by producing 'a cut, a crack' in 'habitual modes of being and thus in our habitual subjectivities' (O'Sullivan, 2006:1). But O'Sullivan (2006:1) explains encounters can also be creative moments of affirmation as we see and think the world differently. If viewed in the abstract these moments of rupture and affirmation can seem to be in opposition, but from inside the experience they bring about something new (O'Sullivan 2006:3).

Other fieldwork participants spoke of the horses 'following us', 'being curious'; 'it felt like [we were] travellers together.' It is interesting to note that others experienced the encounter too. Figure 89 shares an excerpt from Hannah's blog

> *I was with Beth there. I didn't take any photos either, but I can see it clearly. It was definitely walking 'with' and they seemed quite happy for us to join their travels. They seemed to know where they were going. And it was in the same direction as me, so it felt ok. Most of the group (ponies and people) were ahead of us. As we got to the corner, the people peeled off and the ponies carried onwards. That felt ok too.*

Figure 89: Walking-with ponies - an excerpt from Hannah's blog

Hannah suggested we were 'walking with horses for a while' and the testimony above provided an account of what the people and the ponies were doing within the contact zone. She recognised these moments of co-being as often fleeting and temporary. We needed to be attentive to notice them. In seeking a relational understanding of the walking with ponies' event, fieldwork space would be situated as a place for a 'congregational understanding of agency' (Bennett, 2010: 20-21) and in this way decentred the human disrupting the individualistic nature of these encounters.

Drawing on Rautio (2013a: 397) in a blog post Hannah recognised this complexity suggesting she was amongst a wealth of 'agential entities … the sticks and pinecones, the boots, the trees, the human, the drooping branches … the squirrels, the moss…all contributing to the unfolding of the event, all constitutive of each other.' So, each constituent part of the place assemblage was significant within the intra-activity, but different. The animal-geographer contact zones helped us to think about complex manifestations of power in fieldwork spaces. Inspired by Rautio (20013b:448), I engaged with 'Deleuze's 1994 notion of difference as generative, and as the basis of existence rather than a product of our existence as individuals'. Rautio explains (2013b:448):

> 'I am not different, because I am of a certain species. I am different in relation to something other that makes my difference. And this relational difference changes with each encounter: between me and a squirrel the difference generates me in another way than between me and an oak.'

This co-being with ponies account challenged my posthumanist thinking. The video record was from a human source; no horses were interviewed in the study. Yet something was exchanged between human and pony; that is something was known in that moment in the wood.

6.19 Lingering for a while…

As this chapter concludes it marks a momentary pause in my research. I have resisted referring to the next chapter as the conclusion. Koro-Ljungberg (2016a:101) suggested 'conclusions and endings are likely to imply the final world, complete stops and loss of beginnings.' This is not the end of the research project - there are still relational stories to share - encounters with the dragon tree, the telephone box, the museum of curiosities to name a few of the data-researcher intra-actions to come.

There are still ideas to explore and enact, tracks not yet explored, thinking to be done and things yet to be known. My thinking continues to remain 'always in the middle, between things, interbeing, intermezzo' (Deleuze and Guattari,2013:26). Yet this moment to pause offers an opportunity to share my current thinking so far although I acknowledge this is partial and temporary; assumptions are always tentative and remain in-formation.

Chapter 7 ~~Conclusion~~ Opening up many little futures

7.1 Folding together

This chapter is not a traditional conclusion. It constitutes a 'folding together of multiple pasts and opens up many little futures' (Hickey-Moody, 2016:191) in which to consider my current thinking about the potential of fieldwork spaces as more-than-human/human assemblages for attentive, enchanting and relational pedagogies within geographical education. Within a primary education context my thesis has re-examined relationships with fieldwork spaces, natural places, landscapes and more-than-human beings. This rethinking around notions of democracy, agency and difference has begun to plant seeds of ideas and practices emerging from the thesis within a range of transdisciplinary contexts: geographical and environmental education, children's geographies and sustainability, nature connection work and climate change education. I hope these will be significant and have a sustained influence on practice. Within this chapter I draw together my thinking regarding the challenge this thesis offers to recent disenchanted discourses surrounding a knowledge-rich primary geography curriculum dominated by human agency narratives. It is intended to be a provocation for researchers, teacher educators, teachers and trainee teachers to explore and experiment with pedagogic practices that will hopefully enact enchanting, relational, democratic geography fieldwork within more-than-human communities. As David Orr (2007:1392) writes 'hope is a verb with its sleeves rolled up'. I hope this thesis offers educators a practical way forward to help them foster children's sensory, embodied and affective engagements in fieldwork spaces. I aim to work hard to encourage those within and beyond the field of geographical education to engage with more nuanced, lively, ethical geography enquiries in order to be, think and act differently when coming into relationship with the world.

7.2 Productively failing again

This thesis marks a moment of pause in the middle of relational, material and elemental place encounters. In failing to conclude my text and thoughts, I once again return to Koro-Ljungberg's (2016:101) notion of productively failing in order to acknowledge that in 'failing to conclude' I recognise 'more has to and can be done'; the inquiry and research are not finished. This is an ongoing project that has a sense of urgency as relations between more-than-human/humans matter in times of escalating environmental and global crises. My intention with this thesis was not to create a specific framework of how to 'do' relational fieldwork for geography teachers. Rather, I have shared situated encounters within the New Forest specific to the moments that presented themselves during one July weekend. My thesis is concerned with 're-imagining… what method [and pedagogy] might *do'* for geographical fieldwork rather than being concerned with 'what it *is* or *how to do* it' (St. Pierre, Jackson, & Mazzei, 2016:105; authors' original emphasis). It is concerned with consequences and creating fieldwork spaces that are inclusive for both more-than-human/human. Whilst recognising that relational practices are experimental, emergent and need to be continually adapted and revised in the field, I hope the thesis will provide some hints and possibilities to help geographers make connections with their more-than-human fieldwork sites.

Dear Reader,

My post-qualitative approach is risky, but I hope that I have faced the unknown responsibly (Derrida, 1995). That is, mindful of the importance of ethical decisions and care of self and others, both more-than-human and human. Whilst I recognise that the thesis may leave you with gaps, questions and uncertainty it is hoped that by failing to provide a conclusion there is not a way out, a reason to stop reading, interacting and thinking (Koro-Ljungberg, 2016a: 101). The open endedness of the enquiry and this momentary pause are designed to promote further thought as you explore everyday more-than-human worlds.

The intention of this approach is to invite you to extend your thinking about ways to grow our acquaintance and engagement with the world. It is hoped that the creative chaos and messiness of the enquiry emerging from the mingling, curating and folding processes may prompt new questions to explore...

Kind regards

Sharon Witt.

My thesis was written with a spirit of generosity in which the methodologies sought to be both generous and generative (Koro-Ljungberg, 2016a). The study was generous in that it sought to welcome the Other, the more-than-human, into inclusive geographical fieldwork encounters and as participants within this enquiry. Yet I realise my thesis has also productively failed. It has failed in a variety of ways. I want it to:

> 'fail to provide satisfactory and agreed-upon answers, fail to please and confirm the norm, fail to resonate with all readers and fail in many other unthought-of and unthinkable ways. And still be able to give ...'
>
> (Koro-Ljungberg, 2016a:103)

During fieldwork each encounter within a more-than-human space brought us to a threshold and into a new relation which offered the 'possibility of entering into a relational heterogeneous community in the making' (Davies, 2014:20). To be immersed within this community opened spaces where more-than-human/human collaborations can move towards a new kind of scholarship within geographical education; a different way of coming to know the world that might transform its practitioners and participants. This is a relational fieldwork approach that fosters encounters to 'open each particular being to the intensity of their own experience in relation to others' (Davies, 2014:20); it is not straightforward. This study recognises that knowing the more-than-human is limitless and greater understanding and intra-actions with the New Forest only serve to 'finesse the real into a further marvelousness and to reveal other realms of incomprehension' (Macfarlane, 2011: xxvi). Nan Shepherd (2011:59) suggests 'the more one learns of [the] intricate interplay of soil, altitude, weather, and the living tissue of plant and insect (an intricacy that has its astonishing moments as when the sundew and butterwort eat the insects), the more the mystery deepens'. Educators seeking to extend their geography into the more-

than-human community need to be prepared for ‘inevitable false starts, uncertainties and insecurities, turns of relationship, ecstatic experiences, unforeseen events, conflicts, and troubling occurrences, observations that go forever unexplained, the euphoria of insight into human and non-human collectivity’ (Larsen & Johnson, 2012:2).

This study, which has been built on existing theoretical posthumanist/new materialist perspectives, offers practical strategies for an exciting, dynamic, joyful, geography that seeks ‘to turn up the colour and tune in’ to the more-than-human by nurturing ‘a child-like enthusiasm’ with the world (Geoghegan & Woodyer, 2014:219). A generous methodology has impacted on the way that I see my role as a researcher, a geographer, teacher and as a participant of the world. The EdD has been a venture into new territories without the aid of compass or GPS to navigate the way. It has had a huge impact, both personally and professionally, on the way I experience the world. In thinking about this doctoral journey, I recall an encounter with a mountain: becoming-lost with Cairn Gorm, a 1,245 m mountain in the Grampians, Scotland.

7.3 Becoming-lost

> *As an inexperienced mountain walker at the age of 18, I hiked with a group of friends making the challenging climb up the path to Cairn Gorm. The conditions were fine as we left the car park and began our steep and direct ascent via Windy Ridge path on Sròn an Aonaich, but very quickly the situation changed as the wind picked up and we became quickly drenched in mizzle. As I climbed in thick gloom, the wind grew in strength and the rain got heavier, so I put my head down, hood up and persistently kept walking the path; we were being battered on all sides by the weather. Following a welcome break at the Ptarmigan restaurant, we headed for the top, but the*

weather had deteriorated further. As the rain lashed down the mountain became enveloped in mist and the cloud base was low. We reached the plateau and the cairn to mark the summit, but as we wandered away looking for a path for our descent, we became lost. Poor visibility meant our view was obscured, there were no points of reference. We became really disorientated and anxious as the light began to fade. The treacherous conditions meant that spending the night on the mountain in our bivvy bags was looking like a real possibility. As we began to prepare, as if by magic, something changed. The visibility on the plateau began to improve. Suddenly we could see the sky and the land that spread ahead of us. The views across the landscape were spectacular. It was an incredible feeling of relief and excitement as the route down the mountain revealed itself.

I share this encounter as it has many resonances with my EdD journey. At times my thesis felt like a mountain to climb; an adventure that needed patience and persistence. Having spent the last six years reading, experiencing, grappling with new posthumanist/new materialist ideas, writing and exploring relational geographical fieldwork, the path seemed daunting and steep. Like the summit of Cairn Gorm, my view was sometimes obscured. The route was, at times, difficult to navigate and there were moments when I felt 'the familiar falling away' (Solnit, 2006:23). I felt lost and overwhelmed by the sheer enormity of the project I had undertaken. Yet there have been moments when the mist cleared, new rhizomatic lines of flight opened up and new possibilities seemed imaginable and the way forward seemed to clear for a while.

As Koro-Ljungberg (2016b: [online]) reminds us 'uncomfortableness is a part of doing post-qualitative work'. In moving away from more conventional approaches, challenging the status quo, questioning the power relations and hegemony that

privilege the human I have created fieldwork spaces for ambiguity. As Hart (2001:4) reminds us 'when we stretch away from certainty, we make ourselves …vulnerable … and yet vulnerability seems essential for growth.' I purposefully became lost in the hope that new and different knowledge might emerge.

Personal encounters with the world have been significant to inform my study. I return frequently in my mind to Cairn Gorm. The place assemblage – the mountain, the mist, the wind, the cloud, the rain, the group of friends – combined in the moment to make visible the track. The place felt animate and sentient. It made me appreciate that the world is more mysterious, much larger than my knowledge of it (Solnit, 2006). I have a deep respect for the unpredictable power of nature often feeling humbled in the presence of a stunning view, a ferocious hailstorm and a wild and windy day. Its presence is not something I take for granted and hope that I have been appreciative of what fieldwork spaces have chosen to reveal.

I have come to realise that 'to aim for the highest point is not the only way to climb a mountain' (Macfarlane, 2015: 63); there are multiple ways of coming to know a mountainous landscape apart from a route march directly to the top. Over the years I have learnt the benefits of slowing down, lingering, wandering and seeking alternative paths that can lead to surprising discoveries. 'Pausing and dwelling for more than a fleeting moment' (Payne & Wattchow, 2009:16) was embedded within our approach to the New Forest fieldwork to help participants pay attention to detail and remain open to wonder and surprise. Although at times with my post-qualitative study I felt lost amidst a multitude of ideas, theories and experiences searching, creating and trying to navigate an unseen path. I now believe I have come so far along the route there is no turning back. It is no longer possible to experience fieldwork spaces without paying attention to connecting with the more-than-human.

7.4 Unfolding from New Forest fieldwork spaces

This study emerged from geographers' intra-actions with bog, stream, trees, heath, slope, ponies, fire, human participants, phoenixes, dragons and flowers and many different things as the poem from a participant's blog reveals in figure 90. This writing shares the sensory, embodied and affective engagements that brought more-than-human and humans into relationship through entanglements within place assemblages.

Figure 90: The unfolding of the New Forest event

Emerging from the thesis is the notion of fieldwork sites as lively and generative. Relational geographies take the more-than-human seriously believing that fieldwork spaces are co-constituted by a wide range of animals, materials, plants, elements,

moods, memories, experiences, atmospheres and other things. They are meeting places for difference and otherness. These assemblages were temporary, constantly changing and moving as we wandered through the New Forest. Productive moments within these place assemblages enabled diverse repertoires of geography practices to emerge. From these entanglements knowledge of the fieldwork space was co-produced from intra-activity between more-than-human/human participants. This created a relational fieldwork space for co-learning and co-becoming. A space where all elements both more-than-human and human act, learn and do together; as Davies (2018) commented in a recent keynote lecture 'everything has to sing together'.

The fieldwork encounters were contingent, fluid and improvised in the moment and resulted in the participants engaging in playful, empathetic and thoughtful ways. Participants spoke of 'an opening up' and a 'thinking differently' as they encountered the unpredictability of the world through sensory attunement and attention within these spaces of relation. The fieldwork was not always comfortable. It was challenging, at times, for participants to leave behind traditional, humanist ways of engaging with the world. As Winks (2018:390) suggests 'both learners and educators must be prepared to work on the threshold of certainty, comfort and knowledge.' Through mingling with the more-than-human and paying attention to material and elemental dimensions of the fieldwork space, learners appeared to develop 'an intensification of their sensitivity to the world' (Winks, 2018:391). Participants experienced unique geographical encounters with the world that sometimes offered moments of enchantment. The 'found' poem from Phoebe's blog is shared in figure 91 and revealed her experiences of the New Forest as vibrant and sentient.

My thesis proposes that it may be valuable to create geographical fieldwork spaces as places of provocations. But they do require geographers to be attentive and

open to invitations that have the potential ‘to set things in motion, incite questions, produce ideas’ (Ketchabaw et al. 2017:7).

I sat …just listened
As darkness fell
Reacquainting with an old half memory
As I accepted the invitation to
Unfurl into the shadows

I sat…just watched
A length of material on a pole
Weave patterns as the wind reached under and around it
fluttering, vibrating like waves
Oscillations with frequencies
I learnt a lot about the wind
in that moment
by sitting, waiting and observing

I felt excited and alive,
My senses were tingling…

Figure 91: I sat … just listened

This fieldwork was a brief experiment in travelling and enacting these ideas of place invitations and relational fieldwork. I hope that the data-researcher assemblages have begun to reveal some shift from fieldwork-as-usual to a more relational engagement, where geographers become embedded in, and inseparable from, their entanglement with the world. As Trudie wrote this experience ‘made me realise how out of touch I was with the non-human and how important it is to find a spot away from obvious human sights and sounds to tune in to the real world we carefully shut ourselves away from’.

My thesis posits fieldwork as an act of differentiation – the direction of this differentiation is uncertain as we begin. This impacts our fieldwork pedagogies for each time we venture into new fieldwork spaces, we are made a little different by the

relationships that emerge within each specific context. So, relational fieldwork may offer the prospect of transformation through facilitating new depths of understanding and fluency of awareness; this is a felt fieldwork in both the body and in the heart. In order to achieve this, there needs to be a shift in the positioning of geographical knowledge from knowing 'about' a place, to knowing 'with' place. As one participant wrote at the end of the fieldwork experience: 'I felt part of a coherent whole, exploring our route in different dimensions, each of us putting out feelers like some giant tentacled being and then sharing intelligence and emotions. All of this made the experience more comprehensive'. Relational pedagogies seemed to require an acknowledgement of ourselves as connected to each other, to other people and to other things, and a recognition of the active agencies of more-than-human worlds. By engaging in intra-actions within place assemblages alternative perspectives were presented which seemed to challenge and deepen conceptual understandings of space, place interconnectedness, human and physical processes and scale. It made us think about knowledge, not as static, but blossoming and growing through intra-activity as this drawing found on the emerging map in figure 92 revealed:

Figure 92: Flowering knowledge

7.5 The significance of being-with

Geographical fieldwork is at the heart of the subject discipline of geography. This thesis seeks to affirm fieldwork as a key element of practice. Opportunities for fieldwork seem to be dwindling in many schools (Ofsted,2011). Current National Curriculum requirements in England situate fieldwork spaces as places for learners to observe, measure, record, collect information and draw conclusions (DFE,2013). Outcomes for successful fieldwork reside in learners' capabilities for extracting information from the site. This framework positions the fieldwork site as passive and static and reinforces a notion of mastery, that is the fieldwork site exists for extraction and consumption of knowledge by humans. This offers geographers a simplified account of places.

The contribution to knowledge made by this thesis is grounded in its reconceptualisation of primary geographical fieldwork. It challenges current notions of school fieldwork setting out to resist the disenchanted narratives that often frame primary geography. These negative discourses can sometimes hide aspects of the subject discipline that help teachers and children to see possibilities for enjoyment and engagement with the physical world. I have experimented with an alternative way of relating to the landscape that provides a qualitatively different, enchanting fieldwork that offers new possibilities and directions for geography curriculum makers. I acknowledge that the notion of enchantment is something that is mobile, deceptive and complex (Bennett, 2003: 93) and as a result it is unbiddable and unpliable (Curry, 2012). It is important to note it is not possible for a teacher to plan a geography unit of work with the intention of promoting enchanting geographical fieldwork.

Tutor led fieldwork that is outcome focused – even if the outcome is to re-enchant the world would undermine the very notion of enchantment I seek to embrace. That is an enchantment arising from surprise and uncertainty. The best educators can hope

for is to create a community of relational practice that establishes the appropriate conditions to foster enchantment. Relational pedagogies grow within fieldwork communities that adopt an affirmative attitude, are open to multiple perspectives and encourage non-hierarchical and non–linear encounters with a more-than-human world. It is through organic, embedded and embodied experiences in a multi-voiced world that perhaps glimpses, and partial sightings of enchantment may emerge in this ethical-ecological space. This enchanted stance will involve shifting our view of geographical enquiry to explore not judge, understand rather than utilise and describe not explain (Geoghegan and Woodyer, 2014). This study acknowledged the challenges and tensions for fieldwork participants who wish to 'enjoy the world' and seek to navigate the complex paths between disenchantment and enchantment narratives. I am therefore advocating that primary geographer educators should seize the opportunities for teacher agency in curriculum making offered by the government orders (DFE, 2013) to foster more subtle, nuanced and inclusive fieldwork practices that 'affirm the fabulous diversity and natural becomings of non-human things' (Stengers and Prigogine,1997:34). This is a collaborative way of knowing place, emerging from 'embodied practices, doings and actions' (Taylor,2013:690) created within the company of a multitude of more-than-human others.This is knowledge that 'does not come from standing at a distance and representing, but rather from a direct material engagement with the world' (Barad, 2007:49).

In pursing this relational approach to geographical education, fieldwork sites appear simultaneously to be performative, ontological, ethical and pedagogical spaces. It requires a deep commitment from geography educators to being-with and understanding the places of fieldwork as it expands what is 'intelligible, visible and possible' (Piersol, 2015:247). This approach has implications, not only for learners

within fieldwork spaces, but for our everyday relations with the more-than-human world. Undertaking relational fieldwork is political. It is an 'act of allocating time and space for the world to happen, of developing an orientation of curiousness and an eye for serendipity' (Rautio, 2013a: 404). It is important to recognise that this is not an attempt to reduce 'education to untutored learning' (Osberg & Biesta,2008:316) neither is it a 'do nothing' approach assuming a romantic, 'nature will take care of it' orientation (Blenkinsopp et al. (2017: 363). Waiting on place invitations is certainly not an anything goes approach - there is a specific role for educators.

Educators need to remain alert to challenge traditional habits of thought and behaviour that assert human mastery over a fieldwork site, whilst manufacturing 'the voicelessness of the living earth' (Blenkinsopp et al. 2017:363). The way that educators approach geographical fieldwork and the manner with which they mediate more-than-human relations make them the gatekeepers of enchanting moments. This requires pedagogical experiments to direct attention, guide noticing, embrace the mystery and uncertainty of emergent fieldwork. Geography educators must try to model a 'contagious attitude of attentiveness' (Matthews, 1992b:326).

This thesis suggests there is a role for educators to cultivate 'affective openness towards material surroundings: an attentiveness to and sensuous enchantment by non-human forces, an openness to be surprised and to grant agency to non-human entities' (Rautio, 2013a:395). Perhaps too often openness is mistaken for naivete and proceeded to be outdone by education (Gebhardt, Nevers, and Billman-Mahecha, 2003). The current education system dominated by neo-liberal ideas encourages 'concrete answers' and 'learning to be clear and straightforward'; 'little is left that is unknown' (Piersol, 2014:11). Within relational geographical fieldwork an educator's role is that of an 'animateur' who models an explorative approach (Job, 1996:39), valuing

opportunities for learners to discover, ask questions, wander and wonder' 'looking and listening, exploring and thinking, making and being' (Narayanan,2006:7).

7.6 … AND relational geography

My proposal for an alternative approach does not seek to replace existing geography fieldwork practices. As Solem, Lambert & Tani (2013) suggest for many schools' current practices are statutory and linked to summative forms of assessment producing rigorous 'powerful' disciplinary knowledge that learners will need to achieve within society (Solem, Lambert & Tani 2013). However, I believe the current ecological crisis suggests that there is an urgent educational need to nurture a different kind of relationship with the world. One that resists mastery discourses and linear, predictable approaches to learning. This thesis is not an attempt to instil a sense that 'everything is mystical' (Piersol, 2013:11). I also do not intend to imply that subject knowledge, teacher led enquiry-based learning and logic are not important. Rather, I suggest that within geography lessons teachers rarely reveal the possibility of uncertainty, mystery or surprise. Engaging with enchanted, relational fieldwork practices provides learners with opportunities to become lost within the yet-to-be known complexity of more-than-human diversity. This can also create powerful knowledge - 'powerful' in a way that is different to current conceptions within the curriculum; one that possesses the potential for transforming learners' thinking, doing and becoming with the world.

I do not seek to place these different ways of generating geographical fieldwork knowledge in opposition and perpetuate the binary thinking that seeks to separate human/physical, school/academic geography, mind/body and material/discursive. Rather, I suggest relational geographical fieldwork pedagogy as complementary. It could provide an extension to existing approaches within the primary curriculum in the hope of opening a conversation within the geography education community about 'the

power' of emergent, enchanting place responsive approaches committed to engaging with more-than-human encounters. I recognise this proposal could be problematic.

There is tension within the two approaches as they originate from different ontologies and value different epistemologies. Relational fieldwork challenges 'the existence of independent objects with given properties and boundaries' focusing instead on 'situational relational practices that enact entangled and contingent identities and effects' (Fenwick, 2015:91). Tensions also exist in practice within the harsh realities of school. Geography fieldwork is under pressure; it is already viewed as limited and precious. In primary schools curriculum time for geography must be fought for in already overcrowded timetables. Yet, I believe relational approaches to geography matter and educators have a responsibility to provide opportunities for young people to engage with uncertainty, mystery, enchantment, and wonder in the face of profound environmental and global challenges they will face; these matters are too important to be side lined.

This thesis is not about how a relational geographical fieldwork approach can help to 'save the world'; I did not set out to write 'heroic tropes of human rescue and salvation narratives' (Taylor, 2017a:1458). It is also not about romantic notions of child/nature relationships. Instead this study offers a more modest proposal. It suggests there is value in providing opportunities for fieldwork where learners notice the world, including its heterogeneity (Tsing, 2013). This pedagogy may create a collective response to ecological challenges through the generative and transformative powers of low-key, small, attentive worldly engagements (Taylor, 2017a:1458). Children and young people need to experience multi-modal, multisensory, holistic and challenging experiences outdoors in geography. A relational geographical fieldwork

would offer school learners an opportunity to ‘keep working at ways of becoming more worldly’ (Taylor, 2017a:1458).

7.7 Doing geographical fieldwork research differently

The theoretical and practical ideas emerging from the chapters of this living enquiry offer an original contribution to the field of primary geographical education, in the creation and articulation of new ways of researching, thinking and being within geographical fieldwork spaces. This does not propose fieldwork-as-usual rather it positions those engaging with relational geography as itinerant wayfarers. That is, geographers who respond to the flow and flux of place assemblages and take account of the variability within the more-than-human fieldwork spaces. Deleuze & Guattari (1998:476-477) suggest whenever we encounter matter ‘it is matter in movement, in flux, in variation’, with the consequence that ‘this matter-flow can only be followed’. Ingold (2010:97) suggests itinerant wayfarers’ work is ‘not *iteration*, a repetition or re-presentation of the world, but *itineration* as they join with the forces and flows of the world’. In this way within relational fieldwork geographers follow thingly invitations. They join with the materials and elements within the landscapes; the stream as it flows, the ponies as they wander the forest, the tissue paper as it burns in the fire, the wind as it moves the cotton messages on the wishing tree. The wayfaring geographer comes to know the world through their movements and actions within the fieldwork space by coming into conversation and relation with the subject discipline of geography as they navigate fieldwork spaces. This reconceptualisation marks a shifting of the educational narrative to consider geographical knowledge that emerges from geographers attending, attuning and being responsive within a more-than-human fieldwork space.

I deliberately pursued the idea of doing research differently. I intentionally set about getting lost in post-qualitative research spaces in order to resist instrumental discourses that seek to enforce consistency and conformity within praxis and restrain creative and experimental processes. My thesis felt like a glorious opportunity to work in geography's borders and counter the disenchanted, pessimistic accounts that can often surround school primary geography in order to pursue a hopeful, affirmative relational agenda for geographical fieldwork. Undertaking post-qualitative research was a daunting, but exciting prospect. It forced me to question assumptions that I have about knowledge and forced me to think alternatively. Within the field of academic geography Lorimer (2005:90) describes more-than-representational geography as 'breathtaking: likely to leave the traditionally schooled geographer blinking and flinching. The promise is remarkable: transports of delight to a brave new world of fringe science'. I was intrigued by the possibilities for 'on-going critique that critiques itself' (Koro-Ljungberg, 2016b: [online]). Koro-Ljungberg (2016b: [online]) explains 'it is not a turn inwards or toward inner self but rather an ontological/reflective/critical turn, me being aware of what I produce and how'.

There are significant gaps in research into geographical education and minimal research into fieldwork teaching and learning practices (Catling & Martin, 2004; Catling, 2013a). To the best of my knowledge this is the first time that posthumanist and new materialist perspectives have been explored within primary geography education. There is a rapidly growing interest in posthumanism within education research, mostly through early childhood, art and literacy practices. Yet as Taylor & Hughes (2016:1) point out 'in such a theoretically and philosophically rich field, insufficient attention has been paid to the specifically methodological import of these debates. As a former primary school teacher and current geography teacher educator

I was interested in putting theoretical, posthumanist, new materialist and Deleuze and Guattarian theoretical perspectives into practice within fieldwork spaces and relished the opportunities this would offer to respond to calls for methodological innovation and experimentation (Lorimer, 2003).

7.8 A different view

I have been a teacher and lecturer who knew the value of fieldwork – of teaching and learning geography (and other subjects) outdoors. I relished and grasped the opportunity to travel in a community of enquiry with learners exploring, asking questions and making responses in woodlands, parks, school grounds, the University campus, on beaches and in mountainous environments. This New Forest fieldwork seemed to open up possibilities for embracing surprise, complexity and spontaneity that felt different and implied 'renegotiating educational practices' (Jickling et al., 2018:84). The way I view the geographical concept of place and the way I practice geographical fieldwork has transformed forever. Before embarking on my EdD journey I think I possessed a humanist dominated, constructivist led understanding of sense of place. Through the writing of this thesis I have developed a more expanded view of the world with a deeper appreciation for how humans are interconnected with the earth, animals, trees, materials, other humans. I feel privileged to have experienced this fieldwork event in the New Forest and will forever cherish my new found posthumanist perspectives that emerged from opening myself up to be part of 'a richer connected mosaic' (Wattchow & Brown, 2011:193). Bennett (2010:22) calls this 'a mosaic of vital matter'.

Thinking, feeling and moving with posthumanist perspectives has enlivened my ability to be present in and build relationships with the more-than-human world. Geographical fieldwork is now positioned as a three-dimensional material event. It is

important to my work as a geography educator that I consider how teachers and children can learn to pay sensitive attention to the material world. Emerging from my thesis the following practices seem central to relational pedagogies that seek to develop actively open dispositions that are receptive to the world:

Mingling

Exploring

N  TICING

Sharing

Connect⇔ing

L-i-n-g-e-r-i-n-g

Engaging with...

Senses 🖐

S-l-o-w-n-e-s-s

playfulness

gentleness

… STILLNESS.

This thesis has not only impacted on my professional thinking but transformed my ways of being in the world. I have begun to feel a more vivid sense of belongingness to a rich and many-layered world, paying attention to what is alive, which if you look closely is absolutely everything (Blackie, 2018:12). I have found myself tuning in to the invitations of places whether it is in the back garden, walking around my local village or further afield. I have been practicing waiting patiently, being attentive and noticing what happens. In remaining open to thingly invitations I have experienced …

*the spectacular **call** of a breathtaking strawberry moon*

*the salty **smell** of the Solent as I arrived at the coast*

*the **sound of** the honeybees in the ceanothus bush harvesting pollen and nectar*

*the **sight of** the red kites soaring on the air currents in local fields*

*the **soft touch** of alpaca's fur*

*the **sharp taste** of a freshly picked gooseberry*

*the **movement of** the wood ants as they march in search of aphids*

*the **colour** and* mottled marking of a foxglove (a fairy's glove)

*the **strange feel** of warmth from the heat of a volcano rising through my body during a mindfulness exercise at Askja Caldera in the Northern Highlands of Iceland*

*the **push of** the downhill slope on a mountain descent …*

*the **pull of** the first rays of sun as it creeps above the horizon*

My world view has changed – I seek out different experiences that put me into relation with the natural world. I pay attention to sounds, textures, smells, the shifting appearance of day into night, changing seasons and am attentive to my local more-than-human community. This new world view is not always a comfortable or cosy place to be; it can be harsh and emotional. I experienced this when an old tree I had befriended at the bottom of my garden was cut down one day whilst I was at work to preserve a historic wall. I was devastated as the tree had felt part of my extended family. I have found myself becoming more activist supporting the Friends of Sheffield trees against the council's efforts to cut these down. I attended my first 'protest' in Hyde Park on the 22nd September 2018 – the People's walk for wildlife. This event launched the People's Manifesto (Packham, Barkham and Macfarlane, 2018) to ensure we live in a world where all life can flourish. I move forward thinking and being-with the natural world differently.

7.9 Hopeful futures

This thesis introduces some challenging theoretical posthumanist/new materialist perspectives about geographical fieldwork. I acknowledge 'there may be some tensions surrounding how policy makers, curriculum specialists, pedagogical developers and various other versions of 'stakeholders' might make sense of the research work and its implications' (Catling & Butt, 2016:244). Inspired by Chappell, I seek to engage in a quiet revolution to change minds in 'a bottom up way' with a 'grassroots movement to get things done in the absence of a listening ear from policy makers' (Mehta, Henriksen et al., 2019:9)

I recognise that as a tutor in ITE I occupy a privileged position with beginner teachers and in my continuing professional development work with teachers to influence how relational fieldwork might be embedded and encouraged alongside statutory approaches. These collaborations and networks have the potential to lead to transformative practices in marginalised subjects, like primary geography. I am excited about the potential possibilities of on-going practical work with educators, teachers and children to support practical engagement with the theoretical ideas of posthumanism. can be accessed

7.10 Moving forward

In seeking a pause within my thesis thinking I am aware this is only the beginning of my work on relational geography practices – there is so much to take forward. It is hoped that work will be generative within four spaces: Teacher Education within Higher Education, continuing professional development with teachers and teacher educators, public engagement and communicating this work through a publication. Within the first of these spaces through subject specific modules I hope to build the acquaintance of teaching students and school children with landscapes, forests, bogs, beaches, rivers and villages. This work can be conducted within spaces opened up in Higher Education. In taking a complementary, more-than the National Curriculum approach I plan to complete work with my geography ITE students on being-with Downland. I aim to consider statutory content 'describe and understand key aspects of physical geography, including… biomes' (DfE,2013) and enliven and expand this through local fieldwork experiences in the South Downs creating spaces where students intra-act with chalk, grass, butterflies, wildflowers and grasslands. In creating contexts where educators can develop their own understandings, I then hope to create more-than-

human communities of geographical enquiry where these students can work with school children to immerse and explore more-than-human local landscapes.

Whist writing this thesis, I have been collaborating with a colleague to engage with theory/practice. The rehearsal of thinking and the experimenting with ideas in the company of another educator has been helpful in formulating my thinking, particularly the articulation of difficult ideas. I have been leading workshops for teachers at the Geographical Association Annual Conference and local geography champions' meetings. We have sought to open minds to geographical opportunities when travelling in the more-than-human worlds of pigeons, gnomes and bats. These sessions have sought to give context to theoretical thinking and play with the messiness of posthumanist ideas, such as, place assemblages, the socio-material dimensions of fieldwork and the value of attention. Within educational research we have shared at the British Education Research Association conference a new signature pedagogy for educators - a pedagogy of attention (Clarke & Witt, 2017). This attentive pedagogy has been developed in relation to nature connection and sustainability. Though the geography teacher education community (GTE) and primary geography research community at Charney Manor I have explored ideas of place responsiveness and the importance of engaging in sensory, embodied and affective relational fieldwork. There is a commitment to share the thinking and praxis underpinning this thesis and continuing conversations with a wide audience in order to complexify fieldwork spaces and to reveal and appreciate the liveliness of the more-than-human world. This work began on wildthink adventures along the coast of Borth, in the Moelwyn mountains and in the Brecon Beacons. These have been suspended for the duration of the thesis. There are a group of educators who wish to continue to engage in serendipitous fieldwork adventures to further explore how geographers' intra-actions between

practice, experience and theory can further nurture new possibilities for active, affective, democratic and relational spaces for geography teaching and learning.

Throughout the thesis I have often invoked Haraway's (2016) phrase 'staying with the trouble'. This thesis is a record of my efforts to cope with the messiness of more-than-human worlds within fieldwork spaces by grappling with what Taylor (2016b:72) calls 'the ethical dilemmas of these often less-than-ideal encounters and entanglements' in these more-than-human worlds. For future studies I seek to sustain my interest in these vast spaces, but I also believe there is value in taking a more focused approach, for example being silent and waiting, smell walks, listening moments, haptic encounters, to develop a geographers' repertoire of attentiveness. A future publication putting posthumanist encounters to work within educational practices will hopefully explore elemental provocations for learning.

7.11 (In)conclusion

This living experiment of New Forest fieldwork offers a hopeful space that shares experiences of geography educators who begin to embrace the possibility of a relational paradigm shift in thinking about what it means to undertake geography fieldwork and to consider the position of the human in this. It tells the stories of serendipitous geographical explorations as the group wandered over chalk, clay, bog, grass, gravel and mud, through fields and gardens, by streams and in woodlands to pay attention and become acquainted with the agentic more-than-human world. These were 'places where it was still possible to get lost while knowing exactly where' we were (Gaw, 2018: xiv) for as Solnit (2006:23) reminds us 'you can be rich in loss'.

Once more I visit Acres Down heath and as I pause with views across the New Forest laid out in front of me, I begin to make notes of future possibilities for relational fieldwork knowing that my commitment to relational geographical fieldwork will not be

a one-off event only written for my thesis. Rather I have come to appreciate that this will be part of an ongoing, enduring, lifelong commitment to engage in ethical relationships with the more-than-human world. Getting to know bats, local trees and mermaids are written on the list. A willingness to (re)engage with troll geography in Iceland is noted. A desire to (re)think with wombats, koalas and the Barrier Reef in Australia are added. The exciting possibilities of dark and twilight geographies have been rekindled by the Phoenix experience. I want to expand my work at Gilbert White's House, Selborne - thinking with tranquil meadows and glorious Beech Hangers and celebrate living with Chalk Downland. With school children, student teachers and geography educators we will venture forth within fieldwork spaces to continue our conversations and attend to the call of more-than-human geographies. In the company of others…

'I will follow my instincts; be myself for good or ill

and see what the upshot will be.

As long as I live, I'll hear waterfalls and birds and wind sing…

I'll acquaint myself with glaciers and wild gardens, and

Get as near the heart of the world as I can'

(Muir in Wolfe, 1945:144).

Appendices

Appendix 1:

Relational understanding in the National Curriculum (DfE,2013)

Geography

Purpose of study

A high-quality geography education should inspire in pupils a curiosity and fascination about the world and its people that will remain with them for the rest of their lives. Teaching should equip pupils with knowledge about diverse places, people, resources and natural and human environments, together with a deep understanding of the Earth's key physical and human processes. **As pupils progress**, their growing knowledge about the world should help them to deepen their understanding of the interaction between physical and human processes, and of the formation and use of landscapes and environments. Geographical knowledge, understanding and skills provide the frameworks and approaches that explain how the Earth's features at different scales are shaped, interconnected and change over time.

	Key Stage 1	Key Stage 2	Key Stage 3
Knowledge	understand geographical similarities and differences through studying the human and physical geography of a small area of the United Kingdom, and of a small area in a contrasting non-European country	This will include the location and characteristics of a range of the world's most significant human and physical features.	key physical and human characteristics of locations Pupils should consolidate and extend their knowledge of the world's major countries and their physical and human features. They should understand how geographical processes interact to create distinctive human and physical landscapes that change over time. In doing so, they should become aware of increasingly complex geographical systems in the world around them. understand, through the use of detailed place-based exemplars at a variety of scales, the key processes in: physical geography relating to: geological timescales and plate tectonics; rocks, weathering and soils; weather and climate, including the change in climate from the Ice Age to the present; and glaciation, hydrology and coasts human geography relating to: population and urbanisation; international development; economic activity in the primary, secondary, tertiary and quaternary sectors; and the use of natural resources understand how human and physical processes interact to influence, and change landscapes, environments and

			the climate; and how human activity relies on effective functioning of natural systems
Concepts and big ideas	Human and Physical	Human and Physical	Human interconnecting with Physical Complex processes
Fieldwork skills	begin to use geographical skills, including first-hand observation, to enhance their locational awareness. use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment.	use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.	use fieldwork in contrasting locations to collect, analyse and draw conclusions from geographical data, using multiple sources of increasingly complex information.

Adapted by Witt (2018) from the DfE (2013) National Curriculum orders for geography key stages 1,2 and 3

Appendix 2

A compelling case for fieldwork in geography education (Lambert & Reiss 2014:9)

The use of (and investigation of) 'real world' settings - Understanding the uniqueness of place context - The motivation of working in unfamiliar settings (includes 'awe and wonder') - Experiencing the 'unfamiliar' in the familiar/local context, and stimulating curiosity - Understanding through direct experience and/or observation of the world, linking theory and practice
Application and evaluation of knowledge, understanding and skills in 'messy contexts' - Deepening awareness of variability, data handling and statistical modelling - Encouraging caution in explanation, drawing conclusions and decision making - Exploring 'ways of seeing' (surface appearances can deceive) - Using (potentially) all the senses to explore landscapes/phenomena
Developing 'real world learning' - 'Habits of mind': Investigating; Experimenting; Reasoning Imagining - 'Frames of mind': Curiosity; Determination; Resourcefulness; Sociability; Reflection - Enabling critical thinking in the 'naughty world' that does not behave as systems and models predict
Social dimensions - Extended social interaction in meaning making - Iterative processes (e.g. discussion, redrafting) and 'independent' learning - Extended cooperation in problem solving and decision making - Deepen teachers' knowledge of students and their capacities - Awareness of ethical questions, e.g. with regard to other living things

Appendix 3
COLLEGE OF SOCIAL SCIENCES AND INTERNATIONAL STUDIES

Applicant details	
Name	**Sharon Witt**
Department	**Graduate School of Education**
UoE email address	**sw426@exeter.ac.uk**

Duration for which permission is required		
You should request approval for the entire period of your research activity. The start date should be at least one month from the date that you submit this form. Students should use the anticipated date of completion of their course as the end date of their work. Please note that retrospective ethical approval will never be given.		
Start date:14/07/2017	**End date:01/01/2019**	**Date submitted:22/05/2017**

Students only	
All students must discuss their research intentions with their supervisor/tutor prior to submitting an application for ethical approval. The discussion may be face to face or via email. Prior to submitting your application in its final form to the SSIS Ethics Committee it should be approved by your first and second supervisor / dissertation supervisor/tutor. You should submit evidence of their approval with your application, e.g. a copy of their email approval.	
Student number	620033074
Programme of study	**Other** **Doctor of Education (EdD)**
Name of Supervisor(s)/tutors or Dissertation Tutor	**Dr Deborah Osberg** **Dr Kerry Chappell**
Have you attended any ethics training that is available to students?	Yes, I have taken part in ethics training at the University of Exeter **A session on ethics for thesis run by Dr Phillip Durrant** 15/07/2014

Certification for all submissions

I hereby certify that I will abide by the details given in this application and that I undertake in my research to respect the dignity and privacy of those participating in this research. I confirm that if my research should change radically I will complete a further ethics proposal form.

Sharon Witt

Double click this box to confirm certification ☒

Submission of this ethics proposal form confirms your acceptance of the above.

TITLE OF YOUR PROJECT

Fostering relational geographies within inclusive, democratic fieldwork spaces

ETHICAL REVIEW BY AN EXTERNAL COMMITTEE

No, my research is not funded by, or doesn't use data from, either the NHS or Ministry of Defence.

MENTAL CAPACITY ACT 2005

No, my project does not involve participants aged 16 or over who are unable to give informed consent (e.g. people with learning disabilities

SYNOPSIS OF THE RESEARCH PROJECT

Maximum of 750 words.

This study will focus upon geographical fieldwork practices that seek to connect human and physical elements within a place. Participants will include a sample of Initial Teacher Education tutors, primary teachers and student teachers at varying stages in their BEd / MEd in Primary Education courses. This research project is based around a weekend geographical fieldwork event held at an environmental study centre in the United Kingdom.

A 'Wildthink' approach will be adopted for the fieldwork. 'Wildthink' (Owens, Rawlinson and Witt,2012) is a new concept which expresses a framework for creative and critical learning in which participants take time and linger, learning to move slowly, attentively, dialogically and playfully (Owens,2017). Participants will travel together and engage in a series of workshop activities that seek to notice, engage and respond to more than human encounters e.g. rocks, trees, found objects and soils, situated in a range of fieldwork locations around a single site. As they journey, participants will explore the idea that

material elements and matter are 'agentic' i.e. matter responds and matter requires a response to it (Bennett, 2010). This aims to position geographical fieldwork spaces as lively and generative.

It explores the notion that fieldwork participants and places are collectively constructed through these encounters and shaped through the co-habitation of the spaces in between (Malone, 2016). This seeks to position geographical knowledge as dynamic and 'always becoming '(Ellsworth, 2005) rather than a fixed body of static knowledge to recover from a fieldwork site. This relational process would offer an alternative, but complementary vision of fieldwork, opening fieldwork practices to new possibilities for thinking and theorising about place, space and relationality. It would foster an approach to geographical fieldwork that would be committed to notions of holism and pluralism and would engage with ideas of equality, agency and democracy.

These ideas will be framed by a post humanist / new materialist approach that begins from the premise that 'we can know the world because we are connected with it' (Hayles, 1995:48). This offers an alternative perspective to more traditional views of geographical education that appears to separate and elevate humans from the natural world.

My research aims to focus on what happens during the fieldwork that is action and process orientated. The participants of the fieldwork will be considering the following questions regarding elements within a place:

- What constitutes an invitation? or how is an invitation constituted?
- Where are invitations found?
- How do we respond to these?

These questions are formulated in general terms and open to discussion amongst the group

References

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Rautio, P. (2013) Children who carry stones in their pockets: on autotelic material practices in everyday life. *Children's Geographies,* 11(4): 394-408.

Rautio, P. (2014) Mingling and imitating in producing spaces for knowing and being: Insights from a Finnish study of child–matter intra-action. *Childhood,*21, (4), 461–474

INTERNATIONAL RESEARCH

N/A

RESEARCH METHODS

Inspired by the idea of a/r/t/ography in Kothe's (2016) research within museums I seek to position my research as living practice based on relational encounters in place that require the ethics of embodiment i.e. 'being -with' (La Jevic and Springgay, 2008:83). This is research which positions all participants in multiple roles as geographers, researchers and teachers. It works with ideas of openness, listening and being responsive and receptive (Kind,2006). Primary data collection will be conducted by the community of participants as they adopt a 'Wildthink' approach to geographical fieldwork travelling and responding to a variety of sites within one location. The data will be generated through the use of a blog, a 'participant sensing' approach (Pink, 2009), 'emergent mapping' (Kitchin and Dodge,2007) and 'walkabout conversations (Anderson, 2004). We will be mindful that the data collection does not detract from the experience.

Group Procedures

The fieldwork experience is designed to be participatory and inclusive. Continuous reflexivity, dialogue and sensitivity to emerging ethical issues will aim to foster an ethos of trust, honesty and transparency. A code of conduct will be discussed and negotiated by the group that will focus upon the following points:

a. The purpose of the research
b. The value and importance of participation as an individual and as a group
c. Checking understanding of informed consent.
d. The confidentiality of group discussion
e. How can we respect anonymity within the research? Consider group protocol for the participatory decision-making process and discussions to help appreciate it is good to have difference and all contributions are respected.
f. Agreed principles of practice for data collection using photography, digital audio recordings, the blog and social media. We will consider what might be the focus for our data collection if we are focusing on relationships with place, place invitations and responses?
g. Travelling 'lightly' and 'sustainably' being respectful of fieldwork spaces
h. Dissemination plans for data

Blog

- **Design:** A blog will be used to create a space for dialogue and reflection where all members of our group are invited to share their thinking; this is designed to give all a voice. The blog will be used for data collection as follows:

Procedure:

- *Initial contact before fieldwork* - It will not be possible to get the group together before the fieldwork, so the blog will be an (electronic) **space of welcome** where participants are invited to introduce themselves and provide some detail regarding their previous experiences of fieldwork. This is intended to support self-reflection and to help identify commonalities and differences in experience. A link will be sent to all participants for the shared document which is private and confidential and seen only by other members of the community.

- *During the fieldwork* - The blog will be freely available for participants to converse with each other, share ideas and provide **a space for conversation–** participants can pursue conversations started whilst out in the field, make additional comments and all members of the community will have an opportunity to access and engage if they would like to.

- *After the fieldwork*- The blog will provide **a space of reflection** and evaluation after the fieldwork event for participants to make additional comments, share further ideas and follow up conversations started. The blog will remain open for a month after the fieldwork event; this can be negotiated with the group.

Emergent Mapping (Kitchin and Dodge,2007)

a. **Design:** Participants to share data from participant sensing activities to create a collaborative map to share experiences of place invitations. It offers possibilities to create a rich set of data which is both visual (the maps produced) and auditory (the conversations). It is flexible approach that can respond to the contingencies of the fieldwork location.

b. **Procedure:** Participants to have agency to consider their experiences in relation to others through the collaborative mapping of experiences and relationships. Participants will be informed as to the purpose of emergent mapping, how the maps and recordings will be used in dissemination and are free to withdraw from the mapping activity at any time. If a participant decides to withdraw from the study, it will be important to negotiate the shared data in which they have been part of. I will remove their personal data from the study, if requested.

c. The multimedia sensory data and outcomes of emergent mapping will be recorded on digital voice recorders and as photographs.

d. The researcher does not seek to direct the content of the map but aims to manage and participate within a negotiated process. This is challenging, and the power relations will be revisited through the discussions with the participants.

Participant sensing (Pink,2009)

a. **Design:** Sensory fieldwork activities in various locations designed to promote human participants 'attentive engagement' with the physical world in order to foster relations with place.

b. **Procedure**: This will generate data including words (descriptions, poems etc.), pictures, found objects/items, collage, sculptures and photographs of actions sharing responses and emerging relationships. A sustainable art ethic will be adopted for materials for group responses i.e. best effort will be made to ensure materials for recording will be non-toxic, natural in origin or made from recyclable materials

c. Arrangements have been made to record fieldwork responses indoors in case of inclement weather. The community will take the decision to do this together. This will keep everyone

comfortable and safe and is respectful to participants' well-being. We will be mindful if this happens that the research has been removed from context of study – the place.

d. Evolving themes to be discussed with the group. With participants' agreement and permission written pieces will be transcribed as will the community discussion.

Walkabout conversations (Anderson, 2004)

a. **Design:** a mobile method that provides opportunities to collect data in- situ as participants' walk, talk, listen, share and consider the creation of relationships and power within fieldwork spaces.

b. **Procedure:** These conversations will take place across the sample groups to ensure students, teachers and teacher educators are all given a voice within the study and can be carried out by any participants. Consent for recording these conversations on a voice recorder will be sought and negotiated with participants. This method will be piloted and fieldnotes may need to be taken if the outdoor conditions prevent efficient data collection. With permission, these conversations may be shared with the group and will be transcribed for data.

Expected Outputs

The data emerging from this study will form 'vignettes' of practice to illustrate philosophical and theoretical perspectives regarding geographical fieldwork within my doctoral thesis.

The participants' will be aware that further dissemination plans may include:

- Academic presentations on the participatory fieldwork approach
- Conference presentations to professional audiences
- Journal articles for academic and professional audiences
- A book sharing theoretical and practical perspectives for attending to place and place-responsive pedagogies

Ethical permissions will be gained for dissemination of data in a range of formats – see consent form.

References

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La Jevic, L and Springgay, S. (2008) A/r/tography as an Ethics of Embodiment. *Visual Journals in Preservice Education,*14(1),67-89.
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PARTICIPANTS

See sample groups stated above:

- 12 - Student teachers
- 6- Teacher Educators
- 6 - Teachers

This is an emergent project, but throughout the research consideration of the participants will be a central concern with ongoing dialogue and reflexivity to ensure all feel included and have an equal voice in the research. Caution will be exercised to ensure sensitivity, particularly if participants draw on personal experiences.

All participants will receive accommodation for the weekend at the study centre funded by a teaching and learning grant from the University of Winchester. Travel from Winchester can be claimed, but no other financial incentives have been offered to participants.

THE VOLUNTARY NATURE OF PARTICIPATION

All participants will be provided with a project information sheet informing them of the nature of the project, including a brief description of the study, the source of the funding, the purpose of the data collection, the anonymity and confidentiality of the data and the likely use of the data. Participants can then make an informed decision about whether to participate in the research. The potential participant will be required to give their consent around three key issues:

- Project participation
- Use of data generated through the fieldwork experience
- Use of photographs

Project participation

As the data collection for this fieldwork event will be a participatory project it places a high degree of responsibility on all research participants and demands continuous flexibility about participation throughout the weekend. This will be made clear in the consent letter to participants.

As this is a voluntary research project, in accordance with BERA guidelines (2011:6) participants have the right to withdraw from the project for any or no reason and at any time. I will make this clear on the project information sheet. If participants decide to remove themselves from the study, they will be able to continue to share the fieldwork experience. No further data will be collected, and the use of data collected so far can be negotiated or removed from the project. Alternatively, at their request they can remove

themselves from the fieldwork experience if it is safe to do so i.e. no lone travelling around the Forest.

Use of data generated through fieldwork experience

Three key ideas will underpin use of data generated through fieldwork – choices, confidentiality and anonymity

a. **Choices** –Choices over the content of the data will be reviewed and discussed with participants as part of the process approach to informed consent. No participant will be expected to produce particular content or share material that they would prefer to remain private. In addition, any participant can ask for their data to be removed from the project and this request will be complied with until it is no longer practical to do so i.e. when the report is written up. Within participatory research where an individual's data can become part of a community response it can be complex to remove data. Should this situation arise I will have discussions with the individual (and the community) to ensure this is resolved and no data is shared without permission.
b. **Confidentiality**- the study will be undertaken in the spirit of confidentiality with the understanding that anything discussed within the group remains private unless it is agreed this will be shared as data.
c. **Anonymity:** All identifiable information and images will be destroyed, and participants assured of anonymity to protect their identity.

Use of Photographs

During the fieldwork I will be discussing image use, purpose and offer choices throughout the project (Please refer to the project information sheet and consent forms)

SPECIAL ARRANGEMENTS

The needs of participants will be discussed, and adaptations made to ensure they can fully participate within the study.

THE INFORMED NATURE OF PARTICIPATION

It is not always possible to communicate to participants in advance what they are going to experience and, hence, what they are consenting to undertake. Due to the specific methodological emphasis of this project as participatory geographical fieldwork, informed participation will be viewed as an ongoing process rather than a one-off decision. This acknowledges that informed consent is complex and will allow discussion and negotiation of ethical practices as the research unfolds.

Initial consent will be sought where the principles of the study and the fieldwork plans outlined. Full and frank discussions can be shared through the research process to ensure all participants are clear about their involvement at every stage. The permission forms will be carried by the researcher during the fieldwork so that participants can revisit what they

have agreed to and re-sign/tick different boxes if they want to after one of the negotiation points. A consensus will also be sought at the end of the fieldwork weekend to ensure all participants continue to agree to being involved and still give permission for the use of their data to be incorporated. This will ensure they can make a truly informed choice about their involvement within the study.

The Project Information Sheet (discussed above) and sample consent are attached. The aim is for there to be transparency about the plans for the process of participation and decision making within the research process.

ASSESSMENT OF POSSIBLE HARM

The main risks within this research project relate to:

a. <u>Power relations</u>

1. Seek to be mindful of the power relations within the study and work with the binaries e.g. tutor/ student, Teacher/lecturer teacher / student, academic/professional where these power relations may become enacted.
2. Through a spirit for experimentation, creativity and possibility the aim is to engender a collaborative approach to research where the processes of participation and the roles/ actions of the researcher are made explicit.

b. <u>Safety and well-being of fieldwork participants -</u>

1. Offsite activities form completed for University students
2. Risk assessment for the site and the activities will be under taken and control measures put in place to lessen any risk
3. Researcher experienced fieldwork leader with over 30 years' experience
4. Personal contact details and medical information will be collected for all participants. A set of these forms left with a University colleague who can act as an emergency contact.
5. Ongoing dialogue and negotiation to check wellbeing of the participants. During the fieldwork stage should any participant appear distressed the researcher will exercise the usual duty of care for all participants.
6. Safety officer appointed amongst the fieldwork participants and several qualified first Aiders will be present.

c. <u>Ethics arising during fieldwork</u>

1. The researcher acknowledges the messiness of real-world research and the challenges of predicting ethical difficulties and dilemmas that may arise. There will be a need for ongoing reflexivity throughout the fieldwork experience.
2. Advice will be sought from thesis supervisors, Dr Deborah Osberg and Dr Kerry Chappell

DATA PROTECTION AND STORAGE

I will adhere to the guidance as set out in the Data Protection Act of 1998.

All participants' data, including names and addresses will be treated as confidential and anonymity will be assured in accordance with the British Education Research Guidelines (2011).

Participants will be informed of how I intend to use the data generated during the experience within the thesis.

Following the fieldwork:

a. Data will be held anonymously and separate from the names of participants.
b. All data will be stored in a locked filing cabinet (if it is paper based) or on a password protected files stored on the University U- Drive computer (electronic sources).
c. If data is sent for transcription, then I will brief the transcriber on the need to remove any identifying details and will explain to the transcriber what I mean by this (names etc.).
d. It is intended to collect photographs sparingly and purposefully to illustrate points according to the aims of the study. Specific consent for use of images will be sought on consent from and discussed and negotiated through the fieldwork.
e. All medical information will be shredded and destroyed to ensure confidentiality.
f. If data is sent for transcription, then I will brief the transcriber on the need to remove any identifying details and will explain to the transcriber what I mean by this (names etc.).

To ensure the data is available for future papers and presentations participants will be informed of researcher's intention to retain the data, stored anonymously and securely, indefinitely for the purposes of research as allowed within the Data Protection Act.

DECLARATION OF INTERESTS

Students, teachers and teacher educators have had past experience of fieldwork with the researcher and are known to me as (ex) students or colleagues.
I recognise that this creates challenges, particularly with regard to travelling with student teachers within the sample group in terms of the power differential. They may wish to please the researcher who is also their tutor and offer the responses they think the researcher wants for this project rather than offering their own ideas. This will be an ongoing area of concern throughout the study that the researcher will be mindful of and will work to provide all participants with an equitable role in the fieldwork event.

The participants are not all known to each other so 'getting to know you' activities to build community ethos will be important (see idea of blog for initial introductions).

The researcher is employed by the University of Winchester as a Senior Lecturer in Education. This fieldwork, accommodation and transport is being funded by a Teaching and Learning grant from this institution. Participants will be made aware of this on their project information sheet and anonymous and confidential data collected may be used to inform a report and presentation to the University sharing a case study of student/tutors co-constructing learning together. I do not anticipate a conflict of interests. I will ensure participants that the data collected will not be excessive and it is intended that there is a clear distinction between my thesis data and the report for the University of Winchester. I aim to be transparent about the situation. The funding from the University of Winchester

does mean that I can open the invitation to participate to all and no-one is unable to come along because the cost is prohibitive.

USER ENGAGEMENT AND FEEDBACK

The majority of participant engagement and feedback will be sought within the fieldwork space. Responses to geographical fieldwork activities will be sought individually and collectively with participants having ongoing opportunities to reflect upon the process and emergent outcomes.

This situates the majority of the data in the context within which it was generated. A blog will be available up to a month after the fieldwork to collect reflections post fieldwork and create a collaborative space to continue conversations about ideas.

Participants will be informed on the publication of reports connected with the study and copies will be made available to them on request

INFORMATION SHEET

Title of Research Project

Fostering relational geographies within inclusive, democratic fieldwork spaces

Details of Project

*My name is Sharon Witt and I am Senior Lecturer in Education (primary geography) at the University of Winchester. This research project involves a geographical fieldwork event for one weekend from the 14th-16th July 2017 based around ********** In **********, within the United Kingdom. The project will involve year 2 and Year 4 geography specialist students on the Undergraduate programme, newly and recently qualified teachers from the University of Winchester and tutors and geography teacher educators who have an interest in fieldwork from Primary, Secondary and Higher Education. The fieldwork aims to explore human/place relationships. It will involve participants' walking, exploring and immersing themselves in various locations and responding to the invitations from the material elements within a place e.g. a ford may invite us to paddle or float a boat etc. Participants may choose how they respond to these invitations and be asked to record these relational engagements e.g. through words, actions, pictures, art work etc. This data will be collected alongside blog contributions, photographs, fieldnotes, dialogue and emergent mapping collaborations.*

To enable as many of you as possible to participate, this project is being funded by a Teaching and Learning grant from the University of Winchester. Accommodation and travel from Winchester is funded. There will be a £20.00 charge for breakfast and lunch; this study will be non-profit making and any money not used will be refunded.

The group will be travelling with researcher ideas of 'place invitations' but within the fieldwork space the participants will be in control of the data they generate, their analysis and what they choose to share to the researcher / other members of the group. It is hoped the community will together foster an inclusive, democratic space for geographical fieldwork. Along with the other members of this research group you will be invited to engage in decision making processes about consent, participation, anonymity and dissemination and the process of the fieldwork.

I intend to use our data collected in my study for my Professional Doctorate (EdD) which I am completing at the University of Exeter. Your data will be used to illustrate a theoretical framework for relational geography by providing some relational vignettes containing examples of practice. The data collected for this study will be used to create illustrations and descriptions of the fieldwork experience and seek to show the relationships between the human and/or more than human elements that developed in a range of locations visited.

Following the fieldwork, I hope to use the data from our experience in a presentation to the University of Winchester creating a model to show a way that tutors and students co-construct learning together. I hope to share my thesis thinking via conferences e.g. within the geography community, such as the Annual Geographical Association conference, the Geography Teacher Educators' community and Charney Manor Primary Research conference and to share with colleagues at the University of Winchester. It is hoped that this work may lead to a published book as well. No data will be shared without your permission.

Contact Details

For further information about the research data, please contact:

Name: Sharon Witt

Postal address: Faculty of Education, Health and Social Care, Sparkford Road, Winchester, SO22 4NR

Telephone: 01962827071

Email: sw426@exeter.ac.uk

If you have concerns/questions about the research you would like to discuss with someone else at the University, please contact:

Dr Deborah Osberg, Graduate School of Education, University of Exeter, St Luke's Campus, Exeter
EX1 2LU
Email D.C.Osberg@exeter.ac.uk

Confidentiality

The study will be undertaken in the spirit of confidentiality with the understanding that anything discussed within the group remains private unless it is agreed this will be shared as data. All efforts will be used to maintain confidentiality among research participants and the researcher.

Data Protection Notice

The information you provide will be used for research purposes and your personal data will be processed in accordance with current data protection legislation and the University's notification lodged at the Information Commissioner's Office. Your personal data and the data generated together by the fieldwork community will be treated in the strictest confidence and will not be disclosed to any unauthorised third parties. However, if you request it, you will be supplied with copies of your individual data so that you can comment on and edit it as you see fit (please give your email below so that I am able to contact you

at a later date). Through the research, project space will be created to allow for negotiation amongst the community to contribute their ideas on how group data should be collected, documented and interpreted. The results of the research will be published in anonymised form.

Your data will be held in accordance with the Data Protection Act. Paper data will be stored in a securely locked filing cabinet and electronic data will be stored in a password protected file on a University U Drive

Anonymity

Data will be held and used on an anonymous basis, with no mention of your name, but the researcher will refer to the group of which you are a member within EdD thesis e.g. Student, ITE tutor etc. All efforts will be used to ensure anonymity of the data when the project is disseminated and the wishes of participants with regard to photographs complied with (see consent from)

CONSENT FORM

You are being invited to participate in a geographical fieldwork event to be held over the weekend of _____ 2017.

I, the undersigned, confirm that (please tick box as appropriate):

1	I have read and understood the information about the project, as provided in the Information Sheet	
2	I have been given the opportunity to ask questions about the project and my participation.	
3	I voluntarily agree to participate in the project.	
4	I understand that this is a participatory fieldwork event and data will be generated from both personal and group responses	
5	I agree to the following data being used as research data:	
	All data generated ☐ **Or please select below:** Blog contributions ☐ Written responses ☐ Pictorial responses ☐ Artistic responses ☐ Transcripts of audio recordings ☐ Spoken responses ☐ **Photographic data** Please select from the following: I am happy to participate but do not consent to my photograph being used within the EdD thesis and project related presentations and publications ☐	

	I consent to my photograph being used within the EdD thesis and project related presentations and publications and understand the researcher will do their best to anonymise the photograph so that I cannot be identified ☐ I consent to my photograph being used within the EdD thesis and project related presentations and publications and understand that it may be possible that researchers, educators and people from my community will see my photograph. ☐	
6	I understand I can withdraw at any time without giving reasons and that my decision to participate or not participate will not affect my current or future relationship with the University of Winchester	
7	If I withdraw, I understand I am free to choose between destroying my contributions to the study or releasing them for use without my participation	
8	The procedures regarding confidentiality have been clearly explained to me and the researcher will make every effort to preserve my anonymity	
9	The use of the data in research, publications, sharing and archiving has been explained to me.	

.....

.....

(Signature of participant) (Date)

…… ……..……

(Email address of participant.)

....

(Signature of researcher) (Printed name of researcher)

One copy of this form will be kept by the participant; a second copy will be kept by the researcher(s).

Your contact details are kept separately from your interview data.

APPENDIX 4

Certificate of Ethical Approval

UNIVERSITY OF EXETER

GRADUATE SCHOOL OF EDUCATION

St Luke's Campus
Heavitree Road
Exeter UK EX1 2LU

http://socialsciences.exeter.ac.uk/education/

CERTIFICATE OF ETHICAL APPROVAL

Title of Project: Fostering relational geographies within inclusive, democratic fieldwork spaces

Researcher(s) name: Sharon Witt

Supervisor(s): Deborah Osberg
Kerry Chappell

This project has been approved for the period

From: 14/07/2017
To: 01/01/2019

Ethics Committee approval reference:

D/16/17/44

Signature: Date: 06/06/2017
(Dr Philip Durrant, Graduate School of Education Ethics Officer)

Appendix 5

Information letter and draft programme

Faculty of Education, Health and Social Care

University of Winchester
Sparkford Road

Winchester

SO22 4NR

Work Tel: 01962 827071

Email: Sharon.Witt@winchester.ac.uk

June 17th, 2017

Dear all,

THINKING WITH THE NEW FOREST PROJECT

Supported by a University of Winchester teaching and learning bid

Friday July 14th to Sunday July 16th, 2017

Welcome to the Thinking with the New Forest Geographical Fieldwork Research project. Thank you for your interest. Attached to this letter are the following sheets:

- A provisional programme (subject to change – final timings etc to be confirmed)
- The confidential emergency contact / medical questionnaire that all students and staff are required to fill in – please return to Sharon via e mail
- The Project Information Sheet
- Consent Form
- A copy of an information sheet re ticks in The New Forest

Cost: As you know this is a non- profit-making trip and I can confirm the cost of the trip will be no more than £20.00 for breakfasts, packed lunches etc. In addition, participants will have the opportunity to eat in local pubs over the weekend. The residential experience has been subsidised by the University through the teaching and learning grant

as you are participating in a research project. Please bring £20.00 with you to pay on the day.

Participants: At the time of writing there are 16 people involved in the fieldwork.

Accommodation: We will be staying at Minstead Study Centre. Click here to take a virtual tour of the centre

There may also be the facility to camp on the field so if you have a tent you are willing to use. Please bring along with you. Room arrangements will be sorted on arrival.

The address and telephone number are:
Minstead Study Centre

School Lane
Minstead
SO43 7GJ

Telephone: 023 8081 3437

Please contact me regarding any transport issues

Programme: A programme is attached. Activities and locations will be flexible to create space for the invitational quality of places and to respond to weather conditions and local advice/ guidance.

Research: There will be two research projects occurring simultaneously: one to collect data for the teaching and learning project at the University of Winchester and one to collect data for my professional doctorate at the University of Exeter. To avoid too much paperwork, there is only one project information sheet and one consent form to sign. Both projects will be made clear during the fieldwork. Please read, complete and return the consent form to indicate willingness to participate in the research.

If there is anything that is unclear, please ask and if at any time you feel uneasy please come and talk to me about the process.

Pre – Fieldwork Activity

In order to create a space for dialogue and reflection participants are invited to share their thinking through the process in a shared document which only the group have access to. A link will be sent to all participants for the shared document on receipt of consent and medical forms. This activity will be used for data collection in the following ways:

• ***Initial contact before fieldwork*** - It will not be possible to get the group together before the fieldwork, so the blog will be an (electronic) **space of**

welcome where you are invited to introduce yourself and provide some detail regarding your previous experiences of fieldwork/ inspiring landscapes.

- ***During the fieldwork*** - The blog will be freely available for you to converse with each other, share ideas and provide **a space for conversation–**you can pursue conversations started whilst out in the field and make additional comments if you would like to.

- ***After the fieldwork***- The blog will provide **a space of reflection** and evaluation after the fieldwork event for you to make additional comments, share further ideas and follow up conversations started. The blog will remain open for a month after the fieldwork event

- **Personal equipment list:** The following is a suggested list; please use your own discretion. I would strongly suggest you pack for all weather conditions. Even though it is July please make sure you have enough warm clothes; layers are helpful.

Suggestions:

- Comfortable trousers (preferably not jeans as they retain water!)
- Warm sweaters
- Long-sleeved tops
- T-shirts
- Thick socks for inside boots
- Warm hat, gloves, scarf (even in the summer)
- Sun hat (summer)
- Trainers
- Well-fitting walking boots with good tread *
- Waterproofs
- Day sack or small back pack with 2 good straps *
- Washing kit
- Sleeping bag and pillow case
- Pyjamas or nightshirt
- Indoor shoes or slippers
- Sun cream
- lip balm
- Water bottle

Additional Items:

- You will all receive a pack of materials (pens paper etc to travel with) but you may like to bring some materials you feel may be useful to respond to fieldwork locations.
- You may like to bake a cake to share (I know we have some expert cooks coming along!)
- Camera (we will bring iPad for everyone from University)

- Chargers for electrical devices
- Money to buy evening meal in a pub/ local restaurant (Friday/Saturday)
- Bring all your medication

Thank you for your interest. Please return your consent forms and medical forms as soon as possible. Please remember if there are any questions do email and I will get back to you. Just to note I am taking annual leave from 28th June to the 6th July 2017.So looking forward to sharing the weekend with you. Keeping my fingers crossed for sunshine (or dry weather).

Best wishes

Sharon Witt

Draft programme for the weekend

THINKING WITH THE NEW FOREST

Friday July 14th to Sunday 16th 2017

Programme

Please note programme liable to change because the fieldwork will seek to respond to the invitations of the place and also will respond to local guidance on weather information and local conditions

Friday 14th July

4p.m	**Arrival at Minstead**
4p.m	**Welcome – tea and cake**

4.30p.m	**Acclimatise and explore surroundings**
	Opportunity to walk the maze – quiet contemplation for the days ahead
6.00p.m	**Sharing fieldwork approach / safety procedures / ethical considerations / ideas we will be travelling with**
7.00-7.30	**Walk up to the Trusty Servant for evening meal**
	You may wish to pop in and look at the 12th century church and graveyard where Arthur Conan Doyle is buried!

Saturday 15th July

7.30-8.00 a.m.	**Breakfast**
9.00 a.m.	**Leave Minstead site to travel with ideas, immerse and experiment**
6p.m	**Pub supper!**
	Collect responses to the day
	Camp fire

Sunday 16th July

7.30-8.00 a.m.	**Breakfast**
9.30 a.m.	**Clear site and leave Minstead Study Centre**
9.30 a.m.	**Leave Minstead site to travel with ideas, immerse and experiment**
4.00 p.m.	**Closing ceremony**
4.30 p.m.	**Fieldwork finished / heading home**

APPENDIX 6

RISK ASSESSMENT INFORMATION

THINKING WITH THE NEW FOREST

MINSTEAD, HAMPSHIRE

14th – 16th July 2017

List of Participants
Removed to maintain anonymity

Emergency Numbers:

Faculty Administrator Manager:

Programme Leader:

During working hours:

Health, Safety & Business Continuity Manager

Outside working hours:

Emergency Contact:

EMERGENCY PROCEDURES

In the case of emergency Sharon Witt will contact ********** who will hold copies of medical forms and emergency contacts for participants.
In accordance with University health and safety policy, all incidents will be reported to Head of Programme and the Dean of the Faculty.
Incidents involving death, serious injury or serious illness must be reported at the earliest opportunity to the 24-hour University contact and a channel of communication established and maintained.

During working hours: Monday to Friday, 0800-1800:	Health, Safety & Business Continuity Manager	
Outside working hours: All other times	University Security Service	

When making contact it must be made clear that the call is an emergency report of a serious accident or illness.
Once the initial report has been received, the USSO will ensure that all relevant University staff are informed of the situation. This will include the Vice Chancellor, Deputy Vice Chancellor,
Dean of Faculty/Head of Professional Services Department and Director of Student Services.

Responsibility for informing family and friends will rest with the Deputy Vice Chancellor.

Emergency contact:		

Accommodation
Minstead Study Centre
School Lane
Minstead
SO43 7GJ

Office:

Email

Phone

Safety Officer –

ACCIDENT, EMERGENCY

Southampton General Hospital
Tremona Road
Southampton
Hampshire SO16 6YD
Telephone 02380 777222

MEDICAL NOTES

FIRST AID
Kits with Sharon
In kitchen at Minstead
First Aider:

Medical Forms
Sharon has a copy
Copies with Emergency Contact –
Sharon to note any specific medical concerns

Risk Assessment for site and activities – this is a generic risk assessment for groups at the site written by the Centre leaders; this was shared with participants

Risk Assessments of Centre Buildings and Grounds
Emergency exits shared in initial briefing meeting

HAZARD	RISK	CONTROL MEASURES
Kitchen Gas stove Hot Water urn Hot water from taps Sharp knives Hot surfaces	Burns Hot surfaces & Water Scalds Scalds Cuts	Close supervision of group members in kitchen area Close supervision of group members in kitchen area Put cold water in sink first Show how to use correctly Close supervision of food preparation and washing up
Food risks- Allergy	Fatal allergy Choking	Information collected from visiting school Staff training Special diets noted First Aid Training 1:1 supervision of epipen
Buildings Hot water taps and showers Winding stairs Wood stoves Low beams Fire escapes	Scalds Trips or falls Hot surfaces Burns Head injury Steps and height falls	Turn on cold water first in basin and showers Walk up and down Care taken when lighting or filling these Walk around buildings **For emergency use only.** Do not use for normal exit or playing
Bedrooms Bunks Height,	falls	Not for playing on. Do not jump down.
Centre Grounds Steep banks and walls Pond Uneven steps Barbecue / Camp fire Car park areas	Heights, falls Water, drowning Heights, falls Hot surfaces Burns Moving vehicle Run over	**Do not** play or gather near these. Avoid running between areas of the garden. **Do not** play near this Walk up and down. Edges painted white. Care taken when lighting Ensure that participants are not in the car park area when moving vehicles.

HAZARD	RISK	CONTROL MEASURES
Transport		
Private car	Breakdown	vehicles are covered by a breakdown service. Details carried (for procedures in the event of a breakdown refer to drivers handbook).
Lane to Minstead	Narrow Sharp corners Pedestrians	Drive with care Maximum speed 20mph

Outdoor Activities

HAZARD	RISK	CONTROL MEASURES
Ticks	Tick bite Lyme's disease	Pamphlet warning of ticks sent prior to visit Preventative clothing Insect repellent Prompt removal Tick checks Tick tweezers in first aid boxes
Animal encounters in the Forest e.g. Pony bite/kick Cow bite/kick Pig bite/kick Donkey bite/kick	Broken bones Concussion Infection	Warning issued to participants
Snake bite	Poisoning Shock	Wearing wellie-boots Verbal warning Mobile phone for snake bite procedure
Contact with dead animals	Infection	Warning 'don't touch/collect'
Sunburn	Burn to exposed skin	Seek shade Wear hats Use sun block
Dehydration	Heat exhaustion	• Carry extra cold drinks • Adapt energetic activities Seek shade
Exposure to cold	Hypothermia	• Windproof/waterproof clothing provided • Extra layers worn • Hats, gloves essential Curtail activity if very cold

HAZARD	RISK	CONTROL MEASURES
Night Activity Night - May get dark	Uneven ground leading to tripping and falling Darkness Poor weather conditions	Leaders to take torches Group to be briefed Care to be advised

Walking on the Forest Roads

HAZARD	RISK	CONTROL MEASURES
Collision with vehicle	Road Traffic Accident	Verbal warning/instructions Careful group control (define limits)

Walking in the Forest

HAZARD	RISK	CONTROL MEASURES
Walking through forest	A fieldwork participant losing sight of the group/adults – lone group member at risk	Nominal roll of participants Frequent head count
Dead wood	Falling Crushing Injury Concussion Slips & Trips	Safety talk Avoidance of specific trees & ancient woodland in a storm Instructions given on dealing with unstable structures
Contact with branches	Sharp branches eye injury, puncture injuries to body	Verbal warnings given Careful group control front/back marker for speed control Instructions given on sensible carrying of shelter building materials
Handling plants –	Allergy Poisoning Cuts Bracken cuts, inhalation of spores/eating poisonous plants	Verbal warnings given, Show plants not to be picked Hand washing

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